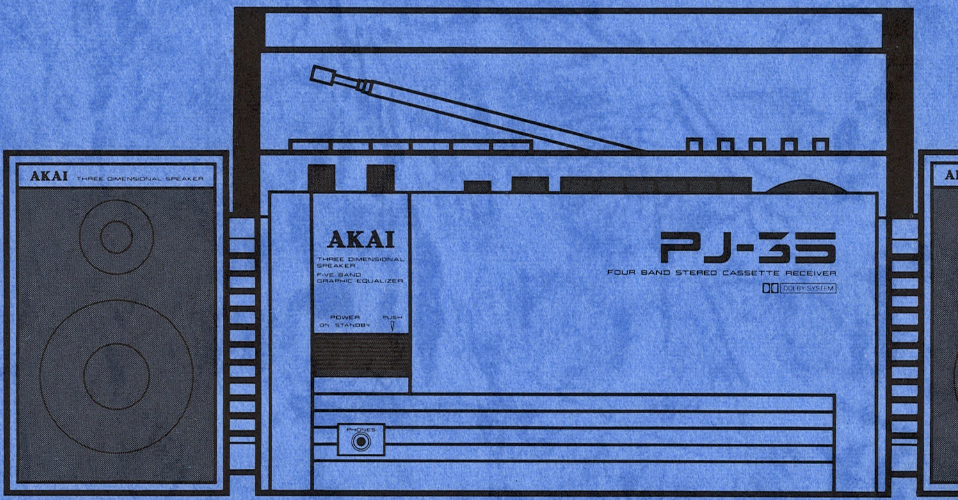
AC193

AKAI SERVICE MANUAL

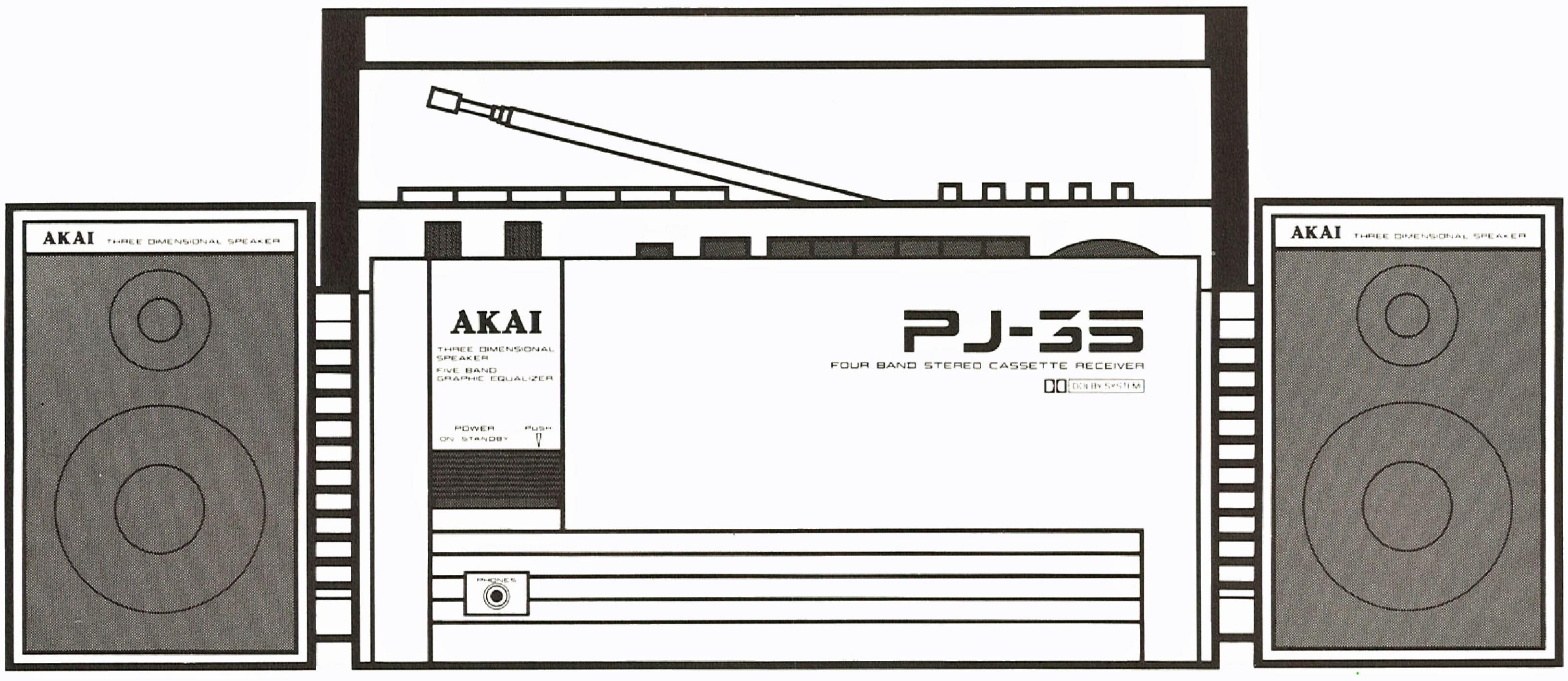

AKAI
THREE DIMENSIONAL SPEAKER
AKAI
THREE DIMENSIONAL SPEAKER
AKAI
THREE DIMENSIONAL SPEAKER
FIVE BAND GRAPHIC EQUALIZER
POWER
ON STANDBY
PUSH
PJ-35
FOUR BAND STEREO CASSETTE RECEIVER
DOLBY SYSTEM
PHONES

FOUR BAND STEREO CASSETTE RECEIVER

MODEL PJ-35FS/FU

AKAI SERVICE MANUAL
(ADDITIONAL)

This service manual is for model PJ-35FL service manual.
For DISMANTLING OF UNIT' CONTROLS' PRINCIPAL PARTS LOCATION and etc, refer to model PJ-35FS/FU service manual.


AKAI THREE DIMENSIONAL SPEAKER
AKAI
THREE DIMENSIONAL SPEAKER
FIVE BAND GRAPHIC EQUALIZER
POWER ON STANDBY
PUSH
PJ-35
FOUR BAND STEREO CASSETTE RECEIVER
DOLBY SYSTEM
PHONES
AKAI THREE DIMENSIONAL SPEAKER

FOUR BAND STEREO CASSETTE RECEIVER

MODEL PJ-35FL

I. SPECIFICATIONS

TYPE	FOUR BAND STEREO CASSETTE RECEIVER

DECK RECEIVER SECTION

FREQUENCY RANGE	FM 87.6–108 MHz MW 530–1605 kHz SW 5,9–16,0 MHz LW 150–290 kHz

POWER OUTPUT PEAK MUSIC POWER

MAXIMUM POWER OUTPUT	Total 30W
RATED POWER OUTPUT	10W x2 (EIAJ 4 ohms)
FTC POWER OUTPUT	7.0W per channel, min. RMS, at 4 ohms from 70Hz to 20kHz, with no more than 10% total harmonic distortion
SPEAKER SYSTEM	Type 3 dimensional –2 way Tweeter 39mm x 2 Woofer 92mm x2 Passive Radiator 87mm x2
TRACK SYSTEM	4 track 2 channel stereo
WOW & FLUTTER	0.08% WRMS (JIS)
FREQUENCY RESPONSE	Metal 50Hz to 16,000Hz Normal 50Hz to 13,000Hz
S/N	Better than 50dB (Dolby NR ON: improves up to 10dB above 5kHz)

GENERAL

POWER REQUIREMENTS	DC power source 12V (eight SUM –1, D, R20 or equivalent sized batteries) AC power source 120V, 60Hz for USA and Canada 220V, 50Hz for Europe except UK 240V, 50Hz for UK and Australia 110V–120V/200V–220V, or 120V/230V, 50/60Hz convertible for other countries.
DIMENSIONS	Total: 538(W) x 165(H) x 187(D) mm (21.2 x 7.4 x 6.5 inches) Cassette receiver: 328(W) x 165(H) x 187(D) mm (12.9 x 7.4 x 6.5 inches) Speaker: 105(W) x 163.5(H) x 152(D) mm (4.1 x 6.4 x 6.0 inches)
WEIGHT	Total: 5.9 kg (13 lbs) Cassette receiver: 3.4 kg (7.5 lbs) Speaker: 1.25 kg (2.75 lbs)

* For improvement purposes, specifications and design are subject to change without notice.

* Noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.

II. TUNER ADJUSTMENT

2-1. THE INSTRUMENT CONNECTIONS

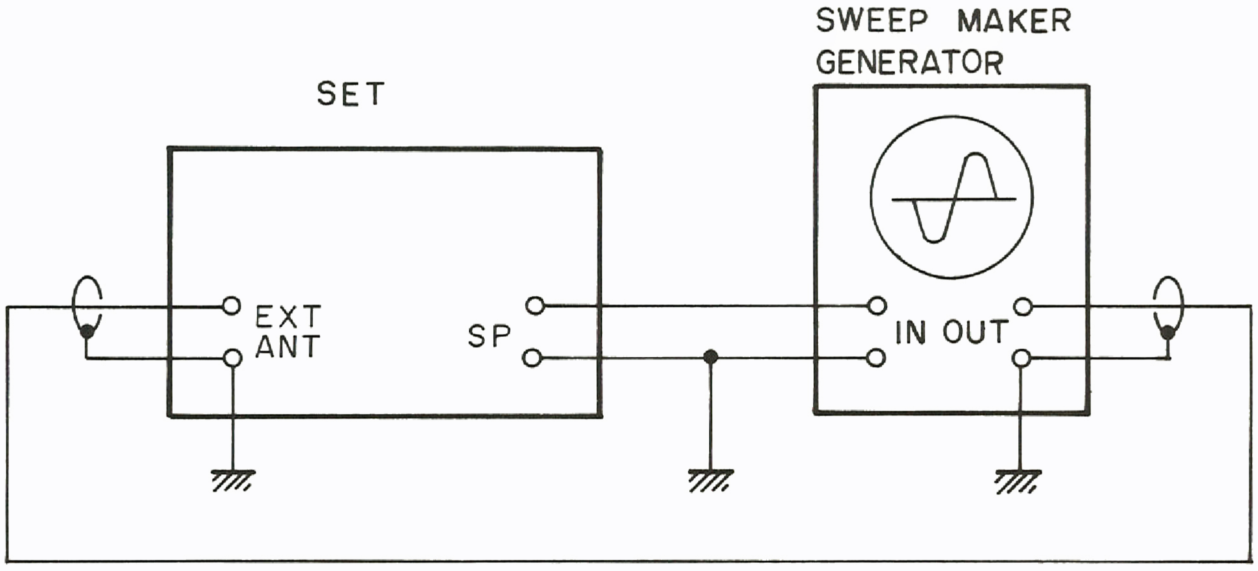

SWEEP MAKER GENERATOR
SET
EXT ANT
SP
IN
OUT

Fig. 2-1 FM IF Adjustment

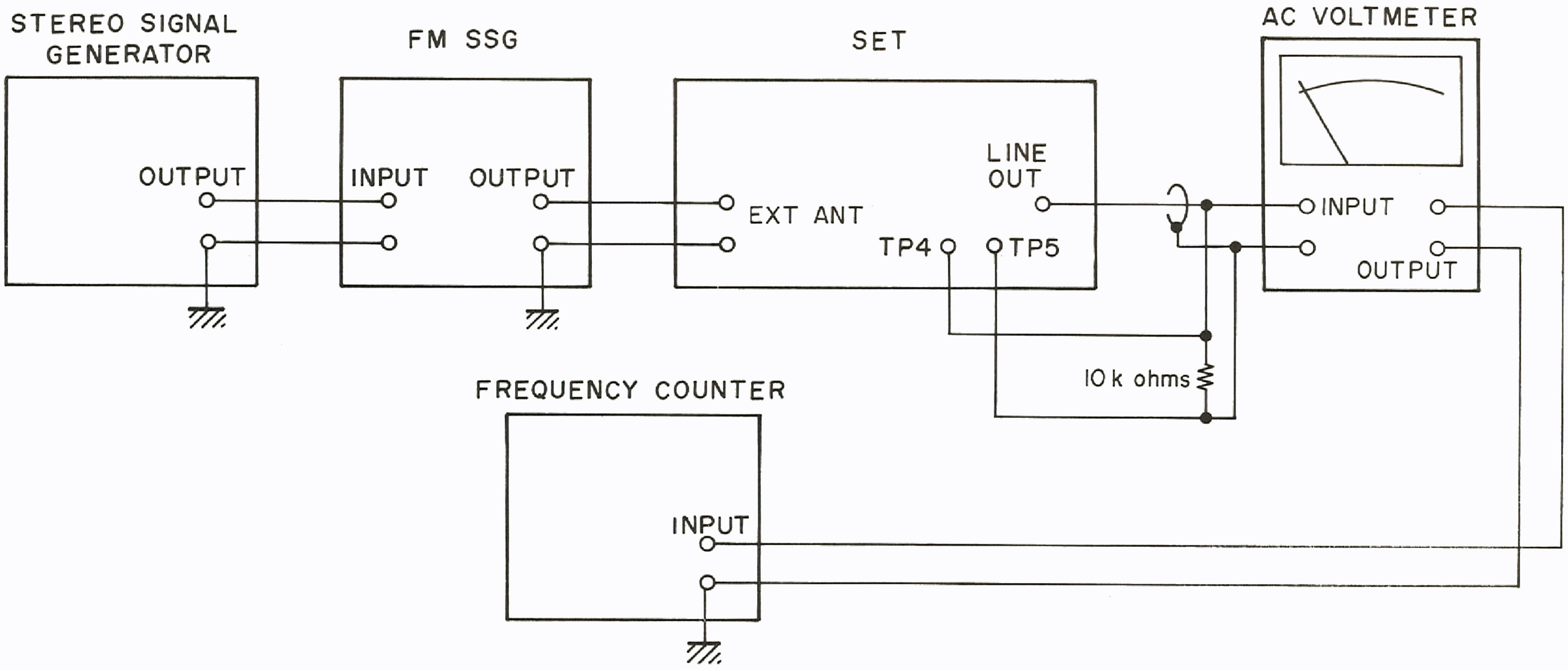

STEREO SIGNAL GENERATOR
FM SSG
SET
AC VOLTMETER
OUTPUT
INPUT
OUTPUT
LINE OUT
EXT ANT
TP4
TP5
INPUT
OUTPUT
10 k ohms
FREQUENCY COUNTER
INPUT

Fig. 2-2 FM Adjustment and Stereo Adjustment

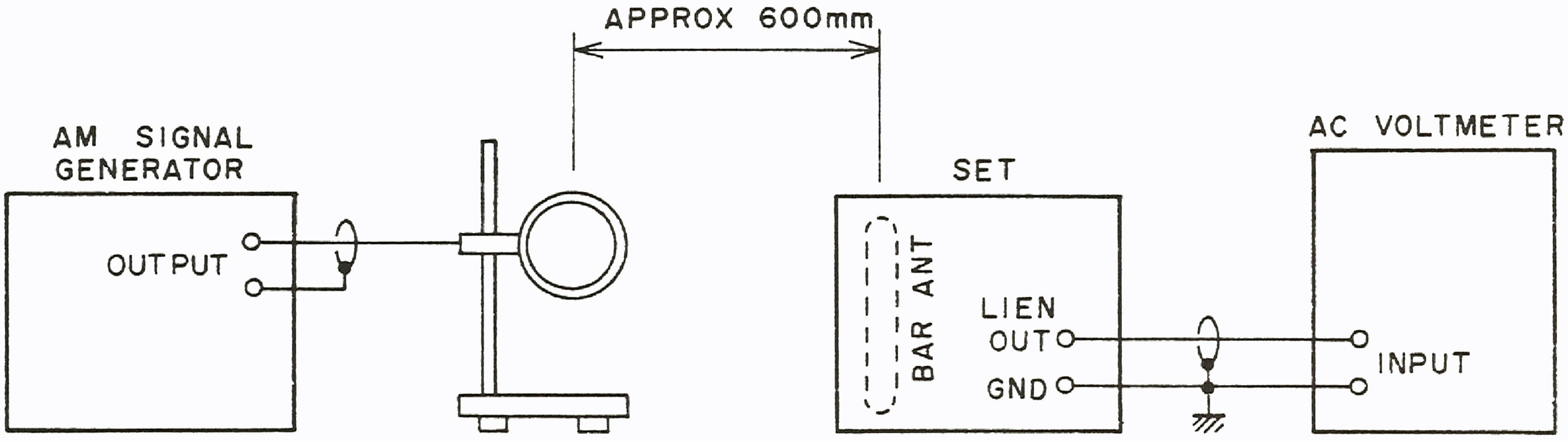

APPROX 600mm
AM SIGNAL GENERATOR
OUTPUT
SET
BAR ANT
LIEN OUT
GND
AC VOLTMETER
INPUT

Fig. 2-3 MW, LW Adjustment

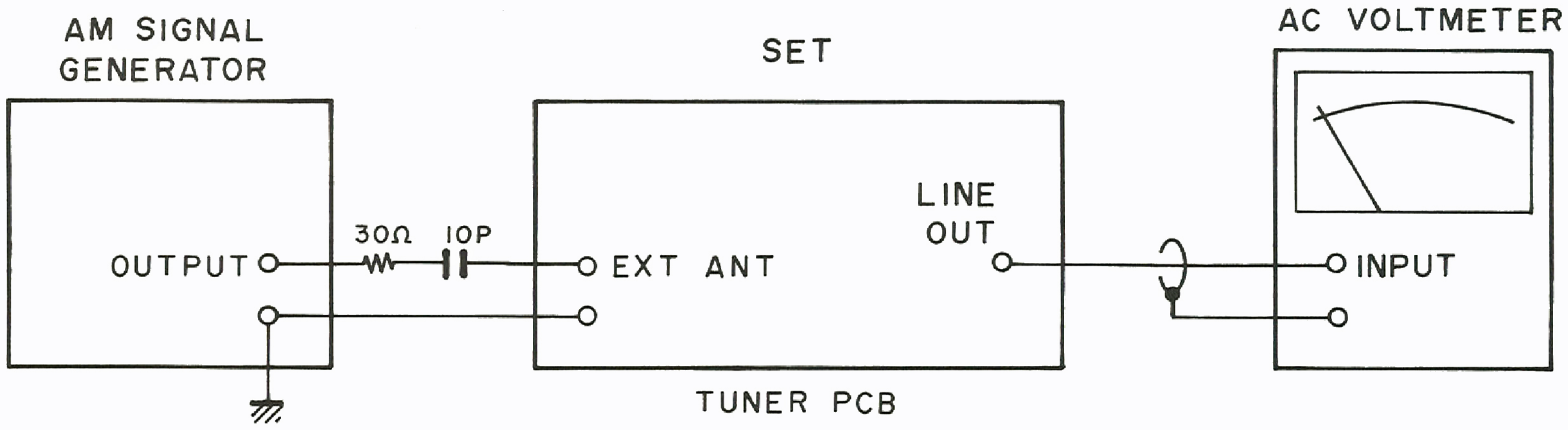

AM SIGNAL GENERATOR
OUTPUT
30Ω
10P
SET
EXT ANT
LINE OUT
TUNER PCB
AC VOLTMETER
INPUT

Fig. 2-4 SW Adjustment

2-2. ADJUSTMENT POINTS

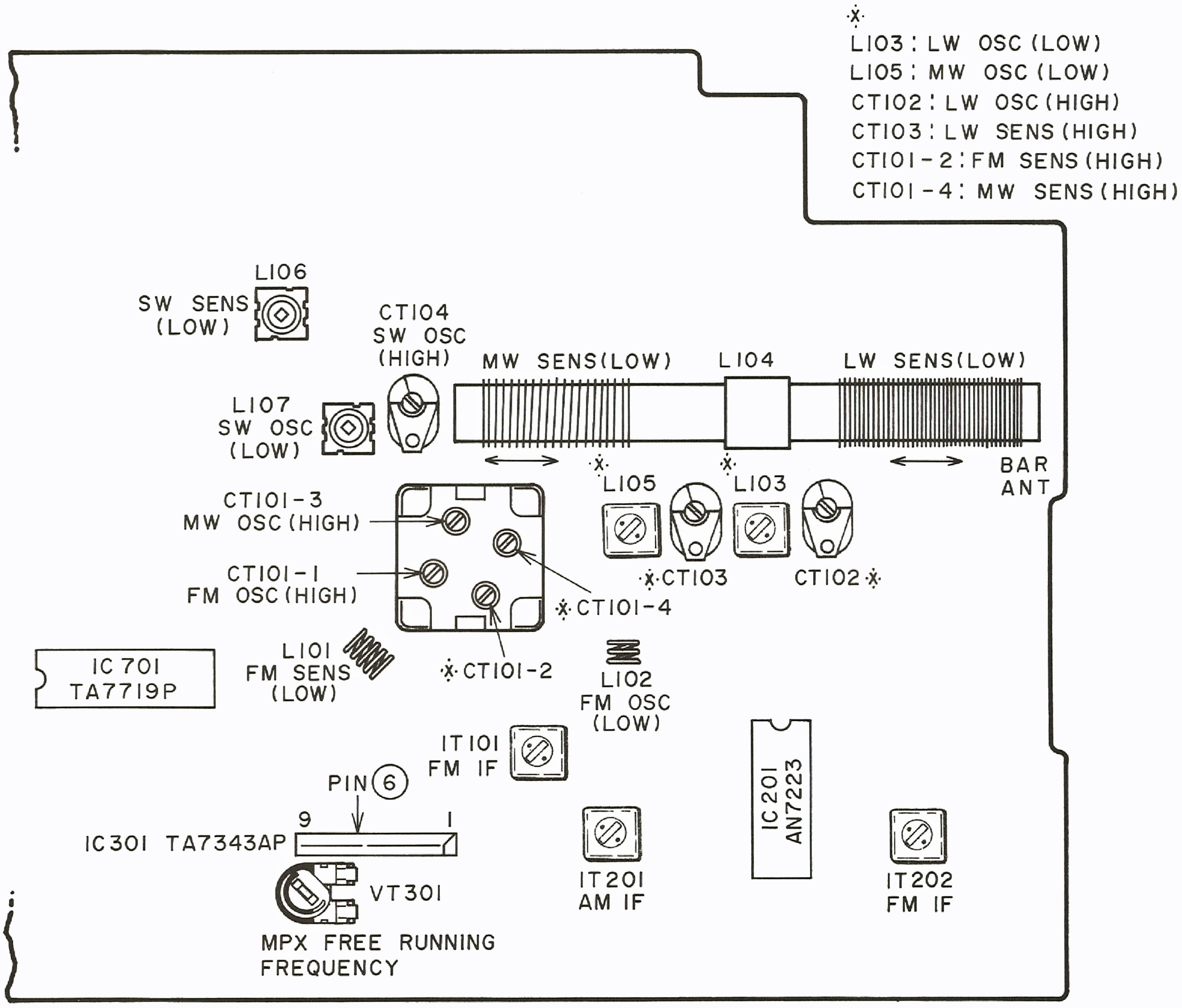
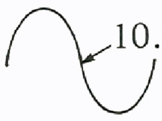

※
L103 : LW OSC (LOW)
L105 : MW OSC (LOW)
CT102 : LW OSC (HIGH)
CT103 : LW SENS (HIGH)
CT101-2 : FM SENS (HIGH)
CT101-4 : MW SENS (HIGH)
L106
SW SENS (LOW)
CT104
SW OSC (HIGH)
MW SENS(LOW)
L104
LW SENS(LOW)
L107
SW OSC (LOW)
※ L105
※ L103
BAR ANT
CT101-3
MW OSC (HIGH)
CT101-1
FM OSC (HIGH)
※ CT103
CT102 ※
※ CT101-4
IC 701
TA7719P
L101
FM SENS
(LOW)
※ CT101-2
L102
FM OSC
(LOW)
IT101
FM IF
PIN ⑥
9
1
IC301 TA7343AP
VT301
MPX FREE RUNNING FREQUENCY
IT201
AM IF
IC201
AN7223
IT202
FM IF

Fig. 2-5

2-3. FM ADJUSTMENT

NOTE:

1. Set the S.S.G to 75kHz deviation, 1kHz for C.A.U.S. models 40kHz deviation, 1kHz for B.E.V models.
2. Confirm that the sensitivity margin between Low and High Range sensitivities is within 3dBμ, otherwise readjust Low and High range sensitivities.
3. 0dBμ = 1μV.
4. Set BAND SELECTOR to FM.

Step	Adjustment Item	SSG FREQ/ATT	SET TUNING	Adjustment Part	Result	Remarks
1	FM IF	10.7MHz 60dBμ	SET TO LOW END	IT101 IT202	 Maximum S Curve waveform (Upper waveform symmetricity)	10.7MHz
2	FM OSC (LOW)	87.3MHz 60dBμ	SET TO LOW END	L102	Maximum output	
3	FM OSC (HIGH)	109.0MHz 60dBμ	SET TO HIGH END	CT101-1	Maximum output	
4	For best Result, Repeat steps 2 and 3 two or three times.					
5	SENSITIVITY (LOW)	90.0MHz 60dBμ	90.0MHz	L101	Maximum output	
6	SENSITIVITY (HIGH)	106.0MHz 60dBμ	106.0MHz	CT101-2	Maximum output	
7	For best Result, Repeat Steps 5 and 6 two or three times.					
8	MPX Free Running Frequency	106.0MHz 60dBμ	106.0MHz	VT301	38kHz ±0.1kHz	Connect a Frequency counter between Pin ⑥ of IC301 and GND.

2-4. MW (AM) ADJUSTMENT

NOTE:

1. Set the S.S.G to 30% 400Hz of each.
2. Confirm that the sensitivity margin between Low and High Range sensitivities is within 6dBμ, otherwise readjust Low and High Range Sensitivities.
3. Adjust the sensitivity (Low) by moving the coil in the direction shown with arrow in Fig. 2-5.
4. Set BAND SELECTOR to MW.

Step	Adjustment Item	SSG FREQ	SET TUNING	Adjustment Part	Result	Remarks
1	AM IF	460kHz	SET TO LOW END	IT201	Maximum output	
2	MW OSC (LOW)	515kHz	SET TO LOW END	L105	Maximum output	
3	MW OSC (HIGH)	1650kHz	SET TO HIGH END	CT101-3	Maximum output	
4	For best Result, Repeat Steps 2 and 3 two or three times.					
5	SENSITIVITY (LOW)	600kHz	600kHz	(MW BAR ANT) (See NOTE 3)	Maximum output	
6	SENSITIVITY (HIGH)	1400kHz	1400kHz	CT101-4	Maximum output	
	For best Result, repeat Steps 5 and 6 two or three times.					

2-5. LW ADJUSTMENT

NOTE:

1. Set the S.S.G to 30% 400Hz of each.
2. Confirm that the sensitivity margin between Low and High Range sensitivities is within 6dBμ, otherwise readjust Low and High Range Sensitivities.
3. Adjust the sensitivity (Low) by moving the coil in the direction shown with arrow in Fig. 2-5.
4. Set BAND SELECTOR to LW.

Step	Adjustment Item	SSG FREQ	SET TUNING	Adjustment Part	Result	Remarks
1	LW OSC (LOW)	145kHz	SET TO LOW END	L103	Maximum output	Set BAND SELECTOR to LW.
2	LW OSC (HIGH)	295kHz	SET TO HIGH END	CT102	Maximum output	
3	For best Resutl, Repeat Steps 1 and 2 two or three times.					
4	LW SENSITIVITY (LOW)	160kHz	160kHz	(LW BAR ANT) (See NOTE 3)	Maximum output	
5	LW SENSITIVITY (HIGH)	250kHz	250kHz	CT103	Maximum output	
6	For best Result, Repeat Steps 4 and 5 two or three times.					

2-6. SW ADJUSTMENT

NOTE:

1. Set the S.S.G to 30% 400Hz of each.
2. Confirm that the sensitivity margin between Low and High Range sensitivities is within 6dBμ, otherwise readjust Low and High Range Sensitivities.
3. Set BAND SELECTOR to SW.

Step	Adjustment Item	SSG FREQ	SET TUNING	Adjustment Part	Result	Remarks
1	SW OSC (LOW)	5.6MHz	SET TO LOW END	L107	Maximum output	Set BAND SELECTOR to SW.
2	SW OSC (HIGH)	16.5MHz	SET TO HIGH END	CT104	Maximum output	
3	For best Result, Repeat Steps 1 and 2 two or three times.					
4	SW SENSITIVITY (LOW)	6.5MHz	6.5MHz	L106	Maximum output	

III. DIALCORD RESTRINGING

1. Build a Dial cord as shown in Fig. 3-1.
2. Turn the Dial drum clockwise fully.
3. Set the Dial cord as shown in Fig. 3-2.
4. Turn the Tuning Dial to Low end, then set the Dial pointer to Low end point as shown in Fig. 3-3.

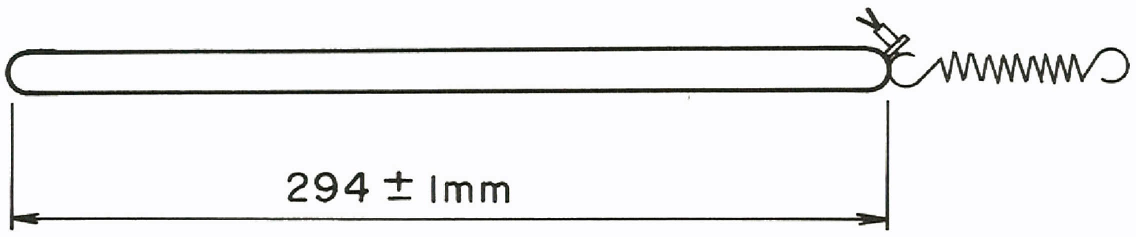


Fig. 3-1

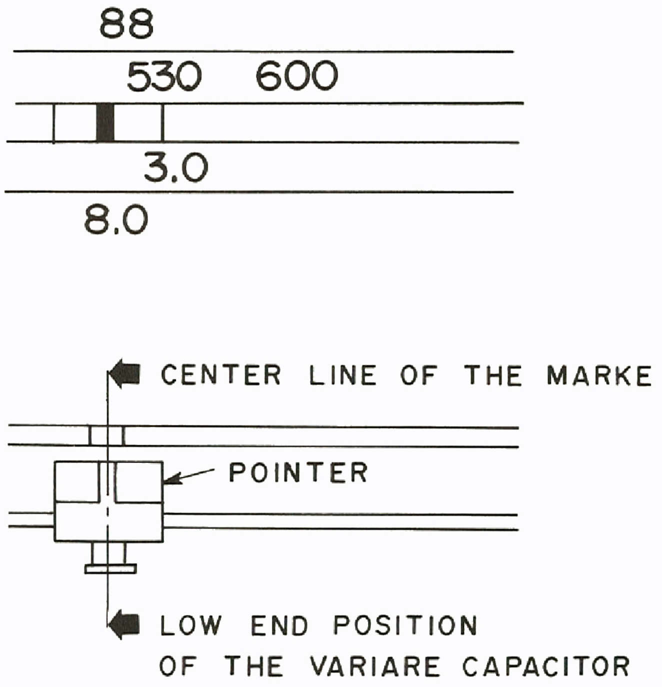

88
530
600
3.0
8.0
CENTER LINE OF THE MARKE
POINTER
LOW END POSITION
OF THE VARIARE CAPACITOR

Fig. 3-3

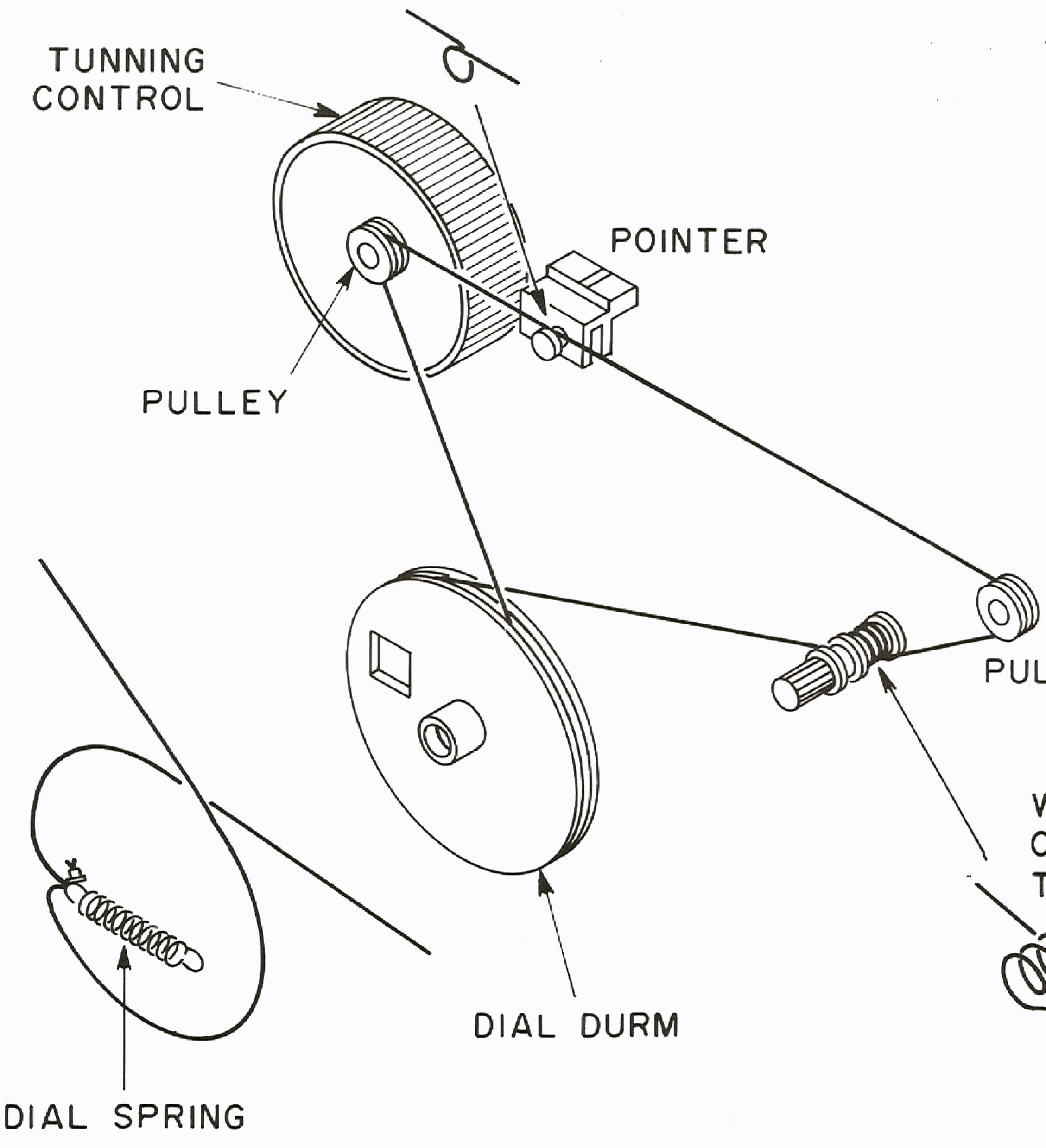

TUNNING CONTROL
POINTER
PULLEY
PULLEY
WIND UP THE DIAL CORD FOR THREE TIMES.
DIAL DURM
DIAL SPRING

Fig. 3-2

IV. PARTS LIST

The composite parts of model PJ-35FL, except for these which have been changed as list following pages, are identical to these of Model PJ-35FS/FU. Therefore, when ordering parts for this Model, please utilize Model PJ-35FS/FU.

2. PC BOARD BLOCK

REF. NO.	PART NO.	DESCRIPTION
2-1B	BA-716655	PC MAIN BLK PJ-35FL
2-2C	BA-716651	PC AF BLK PJ-35FL

NOTE:

(1) PC MAIN BLK consists of following PC BOARDS.
- MAIN PC BOARD
- G.EQ PC BOARD
- REC PC BOARD

(2) PC AF BLK consists of following PC BOARDS.
- AF PC BOARD
- POWER SUPPLY PC BOARD
- POWER SW PC BOARD
- HEAD PHONE PC BOARD

3. MAIN PC BOARD

REF. NO.	PART NO.	DESCRIPTION
3-TR623B	ET-307195	TR2SC2240 GR, BL
3-VT601B,602B	EV-715103	R S-FIX 103
3-L103B	EO-702670	COIL OSC LW
3-L104B	EO-717094	COIL ANT ASSY
3-L105B	EO-713196	COIL OSC MW 22245450
3-L106B	EO-714066	COIL ANT SW
3-L107B	EO-714064	COIL OSC SW
3-CT102B,103B	EC-706605	C S-FIX 1R
3-VC101B	EC-716460	VC POLY VC-4-20/335

4. AF PC BOARD

REF. NO.	PART NO.	DESCRIPTION
4-TR409B	ET-307195	TR 2SC2240 GR, BL
4-R3A	ER-702368	⚠ R FUSE 1/4W 2R2J

5. G.EQ PC BOARD

REF. NO.	PART NO.	DESCRIPTION
5-R856B	ER-303840	R OMF H FS 1W 470J

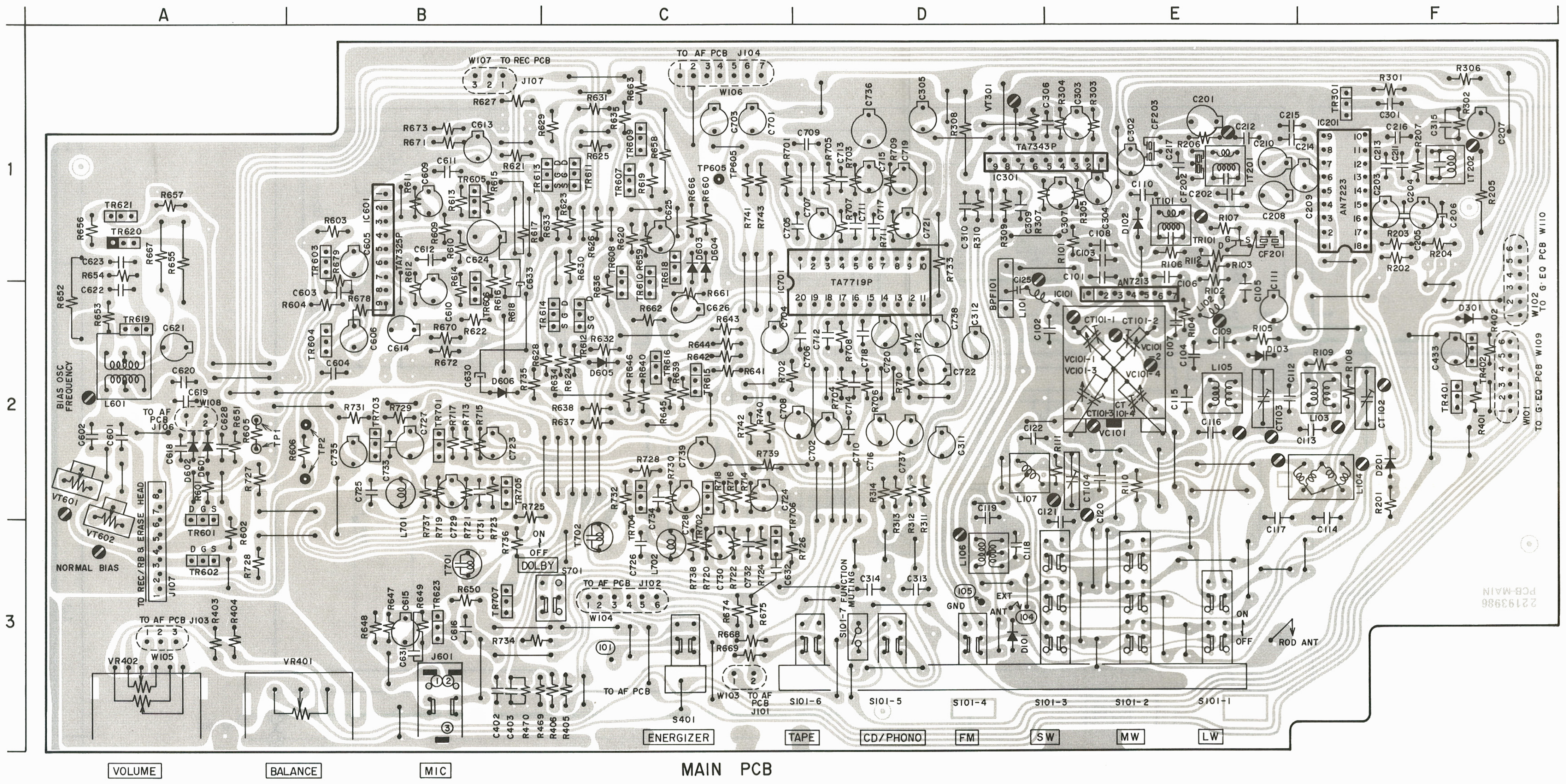
6. POWER SUPPLY PC BOARD

REF. NO.	PART NO.	DESCRIPTION
6-J1A	EJ-715154	⚠ SOCKET INLET
6-F1A	EF-300609	⚠ FUSE FST3100 T 250V 5.00A

7. FINAL ASSEMBLY BLOCK

REF. NO.	PART NO.	DESCRIPTION
7-10xC	EW-706565	⚠ AC CORD [E,V]
7-10xD	EW-716096	⚠ AC CORD 2 CORES BS [B]
7-12B	BC-716151	CABINET UPPER BLK PJ-35FL
7-12D	BC-716458	CABINET UPPER BLK PJ-35FL-R
7-12F	BC-716456	CABINET UPPER BLK PJ-35FL-B
7-T1C	BT-716147	⚠ TRANS POWER 22224723 [E,V]
7-T1D	BT-716146	⚠ TRANS POWER 22224722 [B,S]

AKAI ELECTRIC CO., LTD.



MAIN PCB

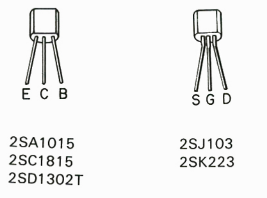
LOCATION OF COMPONENTS

TR's	
TR301	1F
TR401, 402	2F
TR601, 602	3A
TR603, 605	1B
TR604, 606	2B
TR607, 609, 611, 613	1C
TR608, 610, 612,614, 615, 616	2C
TR618	1C
TR620, 621	1A
TR623	3B
TR701, 703, 705	2B
TR702, 704	2C
TR706	3C
TR707	3B

IC's	
IC101	2E
IC201	1F
IC301	1D
IC601	1B
IC701	1D

CONNECTOR's	
W101	2F
W102	1F
W103	3C
W104	3C
W105	3A
W106	1C
W107	1B
W108	2A
(101)	3C
J107	3A

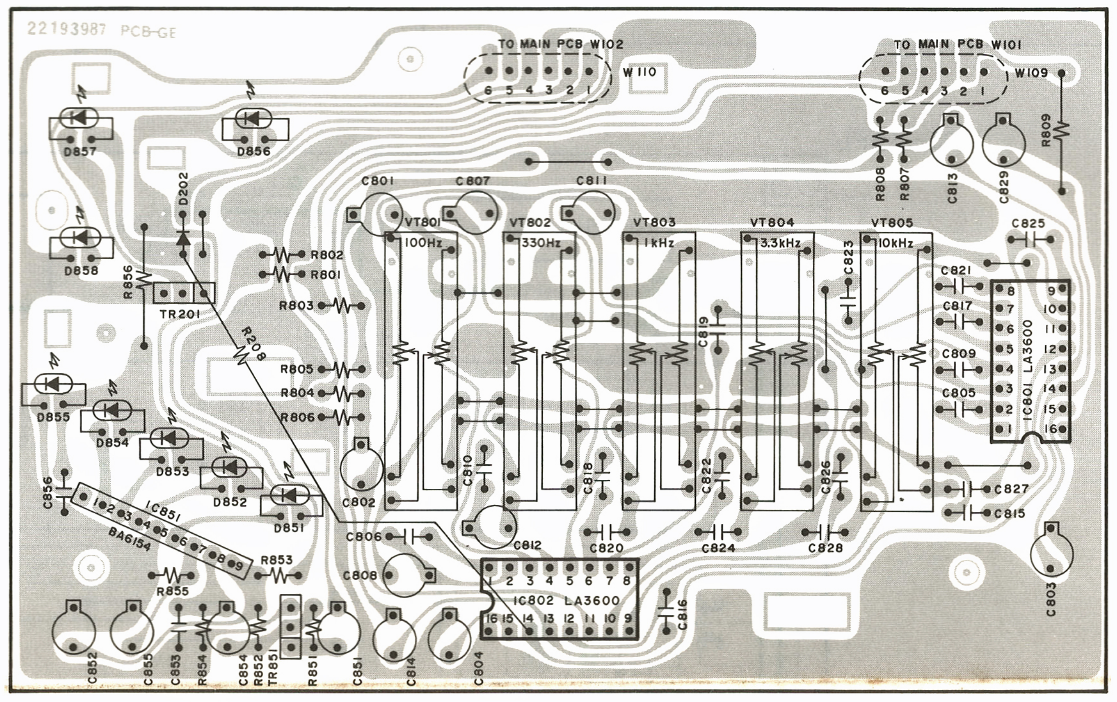
TR301	2SC1815BL
TR401, 402	2SD1302T
TR601, 602	2SK223
TR603, 604	2SD1302T
TR605 to 610	2SC1815BL
TR611 to 614	2SJ103
TR615, 616	2SD1302T
TR618	2SC1815BL
TR620	2SA1015GR
TR621, 623	2SC1815BL
TR701, 702	2SC1815BL
TR703, 704	2SD1302T
TR705 to 707	2SC1815BL



2SA1015
2SC1815
2SD1302T

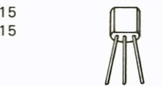
2SJ103
2SK223

L101	FM SENS.(LOW)
L102	FM OSC(LOW)
L103	LW OSC(LOW)
L104	MW,LW SENS.(LOW)
L105	MW OSC(LOW)
L106	SW SENS.(LOW)
L107	SW OSC(LOW)
IT101	FM 1F
IT201	MW(AM)IF
IT202	FM 1F
CT101-1	FM OSC(HIGH)
CT101-2	FM SENS.(HIGH)
CT101-3	MW OSC(HIGH)
CT101-4	MW SENS.(HIGH)
CT102	LW OSC(HIGH)
CT103	LW SENS.(HIGH)
CT104	SW OSC(HIGH)
VT301	MPX Free Running Frequency

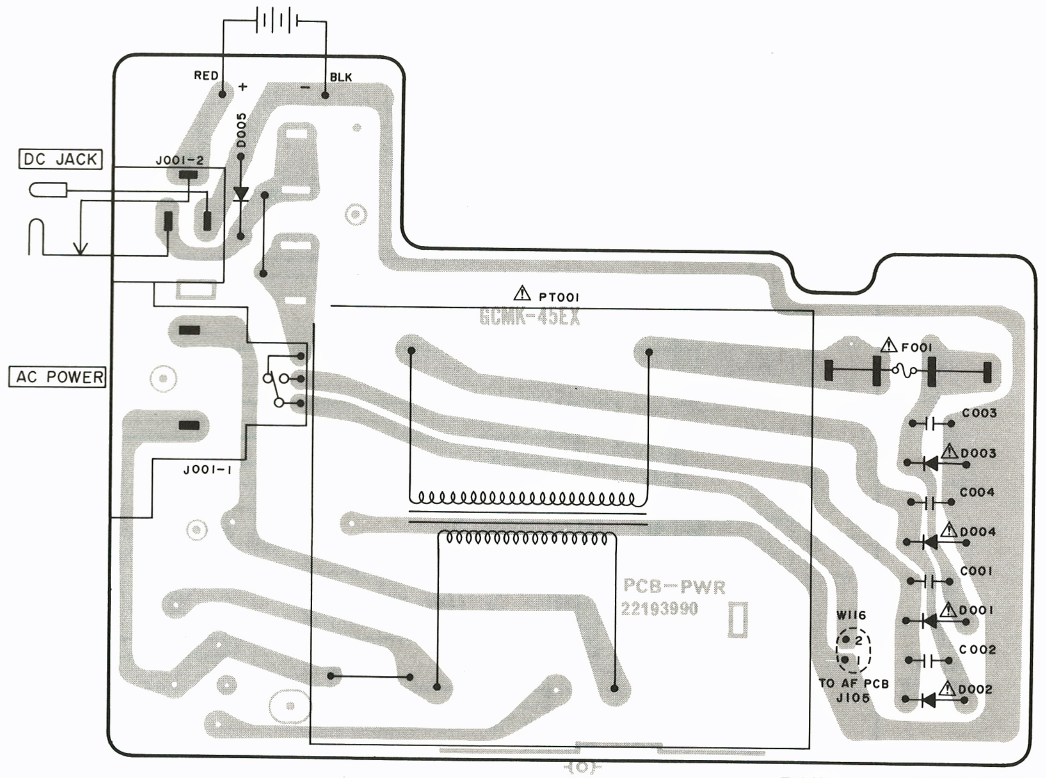


TR201	2SC1815
TR851	2SC1815

G·EQ PCB



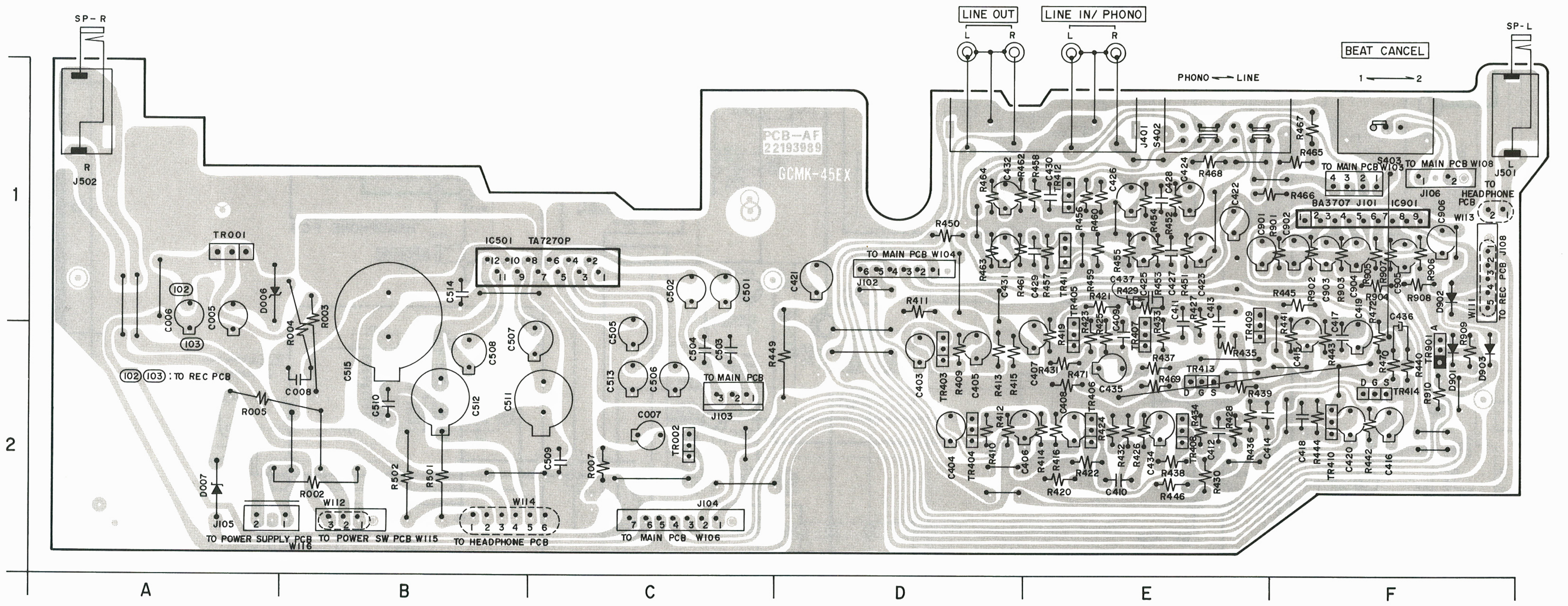
2SC1815



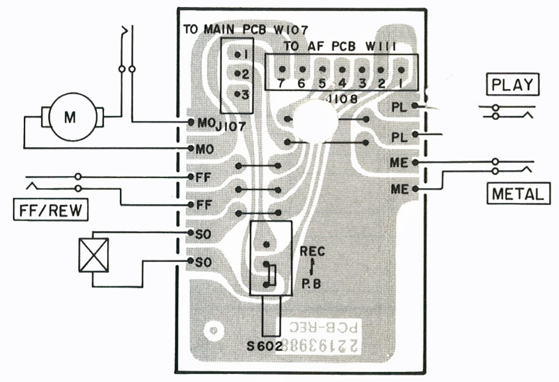
POWER SUPPLY PCB

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

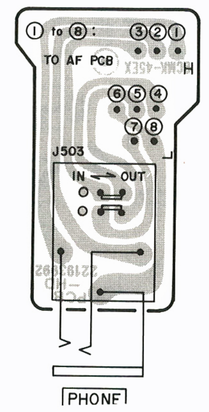
AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

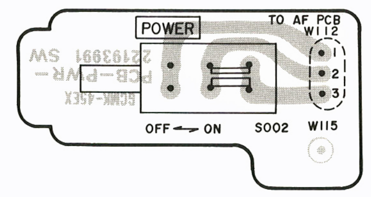


AF PCB



REC PCB





POWER SW PCB

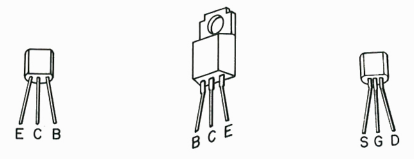
LOCATION OF COMPONENTS

TR's	
TR001	1A
TR002	2C
TR403, 404	2D
TR405, 406, 407, 408, 409	2E
TR410	2F
TR411, 412	1E
TR413	2E
TR414	2F
TR901	2F

IC's	
IC501	1B
IC901	1F

CONNECTOR's	
J101	1F
J102	1D
J103	2C
J104	2C
J105	2A
J106	1F
W111	1F
W112	2B
W113	1F
W114	2B
(102)(103)	1A

TR001	2SD1406Y
TR002	2SC2120Y
TR403,404	2SC2240BL
TR405 to 408	2SC1815BL
TR409 to 412	2SC2240BL
TR413,414	2SJ103
TR901	2SA1015GR



2SA1015GR
2SC1815BL
2SC2120Y
2SC2240

2SD1406Y

2SJ103

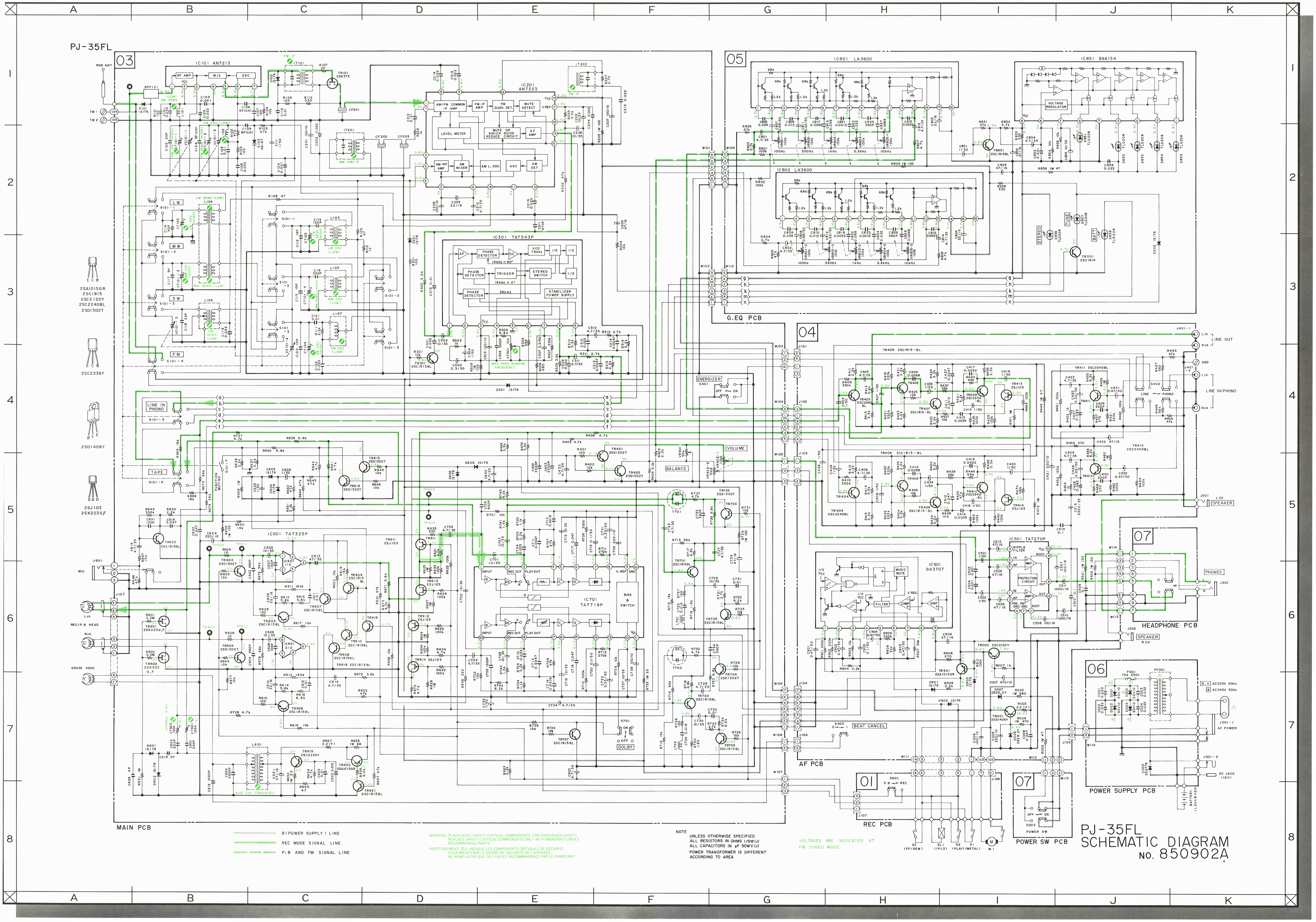
AKAI

SCHEMATIC DIAGRAM AND PC BOARD

MODEL PJ-35FL

PJ-35FL SCHEMATIC DIAGRAM

No. 850902A


PJ-35FL
03
MAIN PCB
IC101 AN7213
IC201 AN7223
IC301 TA7343P
IC601 TA7325P
IC701 TA7719P
05
G.EQ PCB
IC801 LA3600
IC802 LA3600
IC851 BA6154
04
AF PCB
IC501 TA7270P
IC901 BA3707
07
HEADPHONE PCB
06
POWER SUPPLY PCB
01
REC PCB
07
POWER SW PCB
LINE OUT
LINE IN/PHONO
SPEAKER
PHONES
AC POWER
DC JACK (12V)
BATTERY (1.5V x 8=12V)
ENERGIZER
VOLUME
BALANCE
BEAT CANCEL
DOLBY
STEREO
TUNE
BATT
ROD ANT
MIC
REC/P.B HEAD
ERASE HEAD
BIAS OSC FREQUENCY
MPX FREE RUNNING FREQUENCY
S3 (FF/REW)
SL1 (IPLS)
S2 (PLAY)
S1 (METAL)
M1
ECB
2SA1015GR
2SC1815
2SC2120Y
2SC2240BL
2SD1302T
2SC2236Y
2SD1406Y
SGD
2SJ103
2SK223GF

B (POWER SUPPLY) LINE

REC MODE SIGNAL LINE

P.B AND FM SIGNAL LINE

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

NOTE

UNLESS OTHERWISE SPECIFIED

ALL RESISTORS IN OHMS 1/8W (J)

ALL CAPACITORS IN μF 50WV (J)

POWER TRANSFORMER IS DIFFERENT ACCORDING TO AREA

VOLTAGES ARE INDICATED AT FM TUNED MODE.

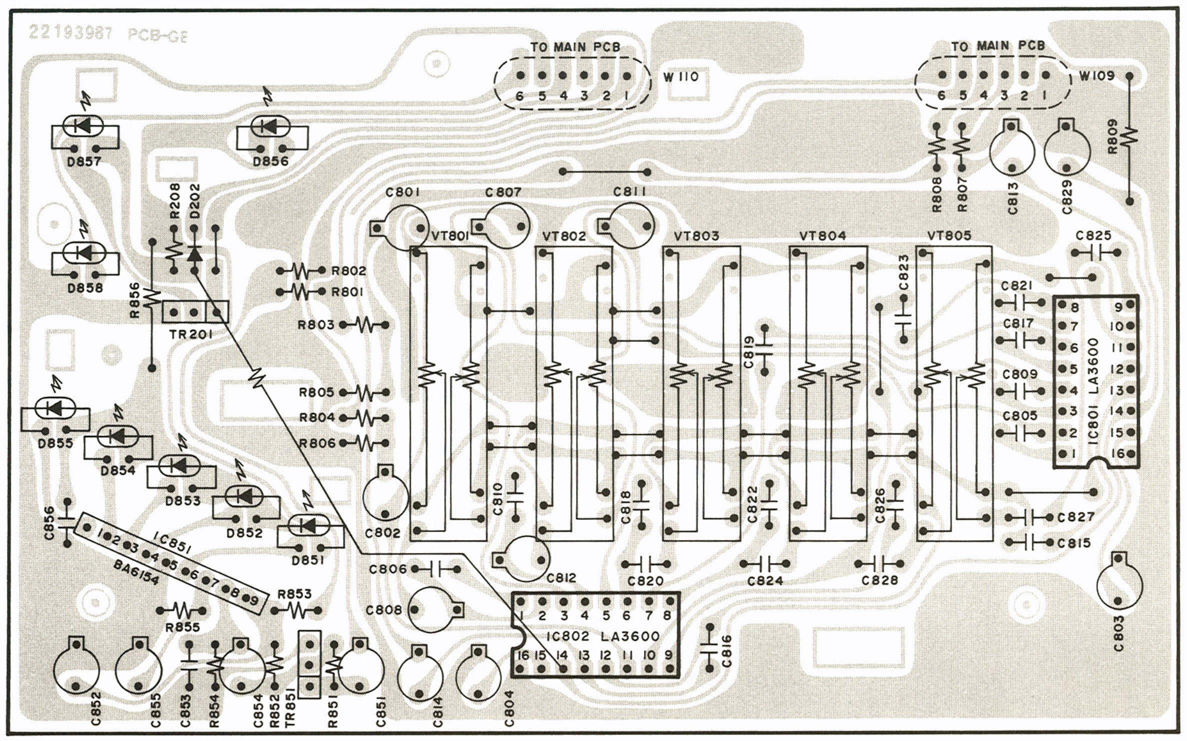
AKAI

MODEL PJ-35FS/FU

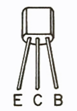
SCHEMATIC DIAGRAM AND PC BOARD

TABLE OF CONTENTS

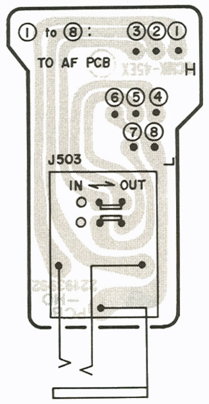
1. G.EQ PCB, HEAD PHONE PCB, POWER SUPPLY PCB, POWER SW PCB, REC PCB 2
2. AF PCB 3
3. MAIN PCB 4
4. PJ-35FS/FU SCHEMATIC DIAGRAM 5


22193987 PCB-GE
TO MAIN PCB
6 5 4 3 2 1
W110
TO MAIN PCB
6 5 4 3 2 1
W109
D857
D856
D858
D855
D854
D853
D852
D851
R208
D202
R856
TR201
R802
R801
R803
R805
R804
R806
C801
C807
C811
VT801
VT802
VT803
VT804
VT805
R808
R807
R809
C813
C829
C825
C821
C817
C809
C805
C823
C819
IC801 LA3600
C810
C818
C822
C826
C827
C815
C802
C806
C808
C812
C820
C824
C828
IC802 LA3600
C816
C803
C856
IC851
BA6154
R853
R855
C852
C855
C853
R854
C854
R852
TR851
R851
C851
C814
C804

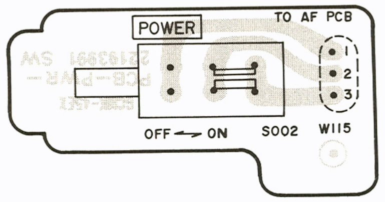
TR201	2SC1815
TR851	2SC1815


2SC1815
E C B

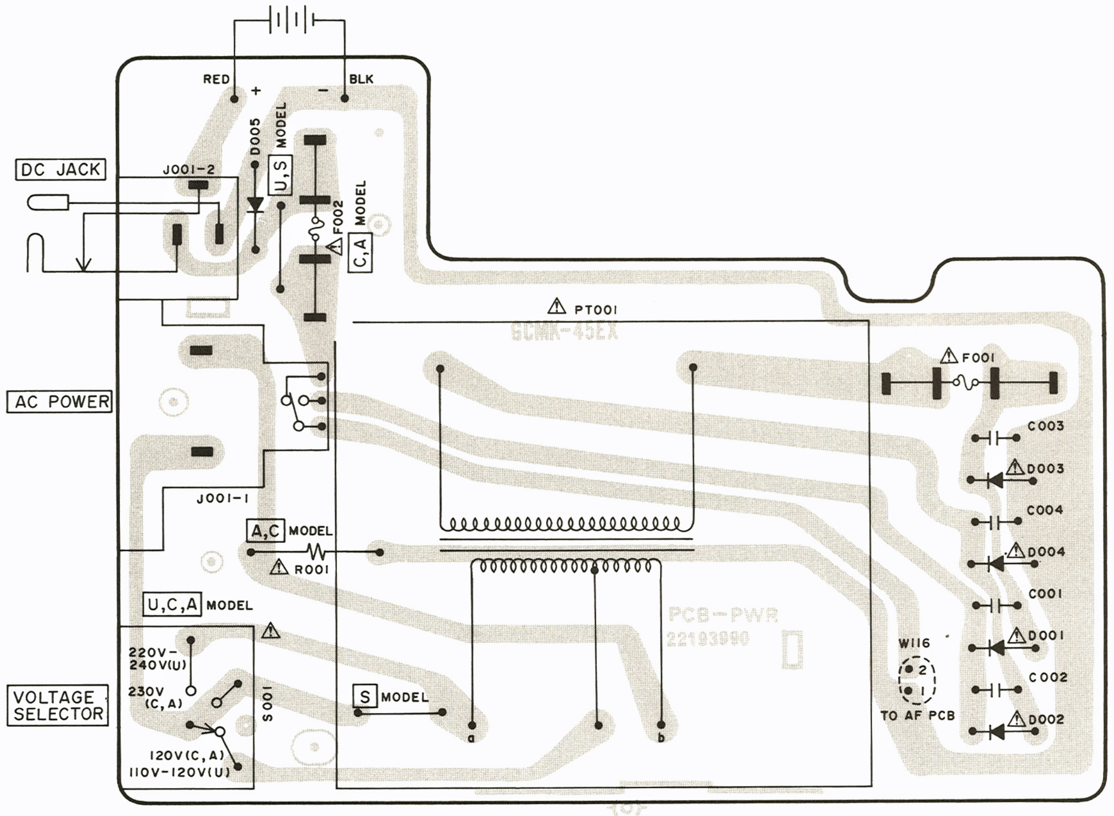
G·EQ PCB


① to ⑧: ③②①
TO AF PCB
⑥⑤④
⑦⑧
H
J503
IN ⟷ OUT
PHONE

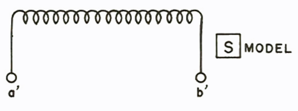
HEADPHONE PCB

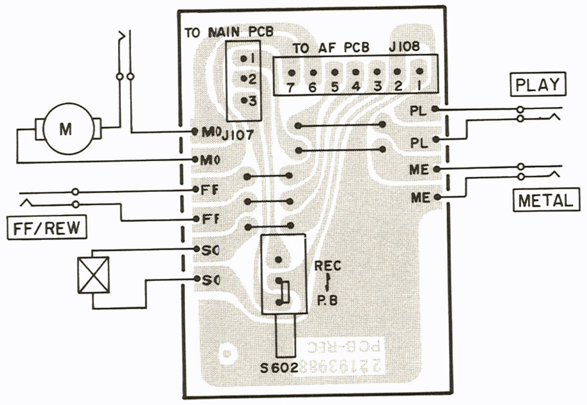

POWER
TO AF PCB
1
2
3
OFF ⟷ ON
S002
W115

POWER SW PCB


RED
+
−
BLK
DC JACK
J001-2
D005
U,S MODEL
F002
C,A MODEL
AC POWER
⚠ PT001
⚠ F001
C003
⚠ D003
C004
⚠ D004
C001
⚠ D001
C002
⚠ D002
J001-1
A,C MODEL
⚠ R001
U,C,A MODEL
⚠
VOLTAGE SELECTOR
220V-240V(U)
230V (C,A)
120V(C,A) 110V-120V(U)
S001
S MODEL
a
b
PCB-PWR 22193990
W116
2
1
TO AF PCB

POWER SUPPLY PCB

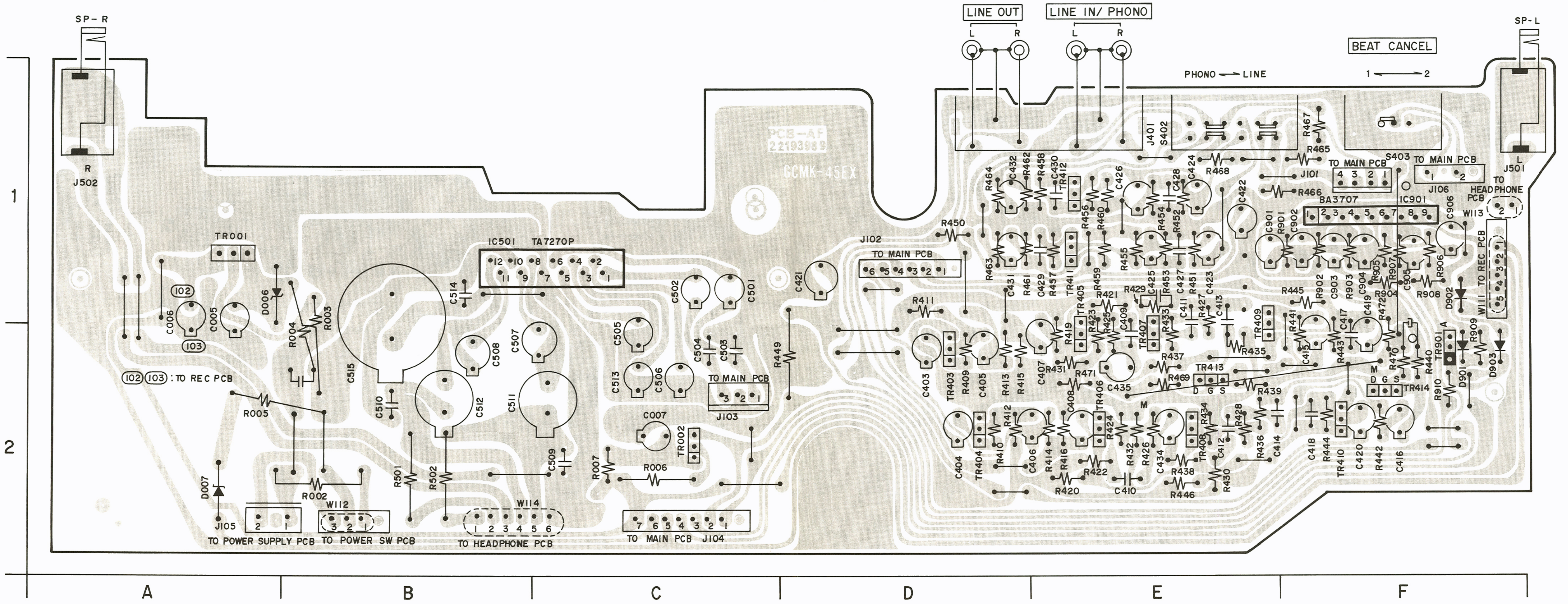



TO MAIN PCB
TO AF PCB
J108
1
2
3
7 6 5 4 3 2 1
M
MO
J107
MO
FF
FF
SO
SO
FF/REW
PLAY
PL
PL
ME
ME
METAL
REC
P.B
S602

REC PCB

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY.
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S
RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.
POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL,
NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT


SP-R
SP-L
R
J502
L
J501
LINE OUT
LINE IN/ PHONO
L
R
BEAT CANCEL
PHONO ⟵ LINE
1 ⟶ 2
PCB-AF
22193989
GCMK-45EX
TR001
IC501 TA7270P
BA3707
IC901
J101
J102
TO MAIN PCB
J103
TO MAIN PCB J104
J105
TO POWER SUPPLY PCB
W112
TO POWER SW PCB
W114
TO HEADPHONE PCB
J106
TO MAIN PCB
S403
TO MAIN PCB
TO HEADPHONE PCB
W113
W111 TO REC PCB
J401
S402
(102)(103): TO REC PCB
TR002
TR403
TR404
TR405
TR406
TR407
TR408
TR409
TR410
TR411
TR412
TR413
TR414
TR901
D006
D007
D901
D902
D903
C515
C510
C512
C511
C507
C508
C501
C502
C421
R449
1
2
A
B
C
D
E
F

AF PCB

LOCATION OF COMPONENTS

TR's

TR001	1A
TR002	2C
TR403, 404	2D
TR405, 406, 407, 408, 409	2E
TR410	2F
TR411, 412	1E
TR413	2E
TR414	2F
TR901	2F

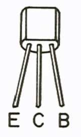
IC's

IC501	1B
IC901	1F

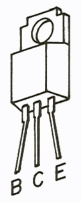
CONNECTOR's

J101	1F
J102	1D
J103	2C
J104	2C
J105	2A
J106	1F
W111	1F
W112	2B
W113	1F
W114	2B
⑩②⑩③	1A

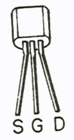
TR001	2SD1406Y
TR002	2SC2120Y
TR403, 404	2SC2240
TR405 to 410	2SC1815BL
TR411, 412	2SC1815BL
TR413, 414	2SJ103
TR901	2SA1015GR



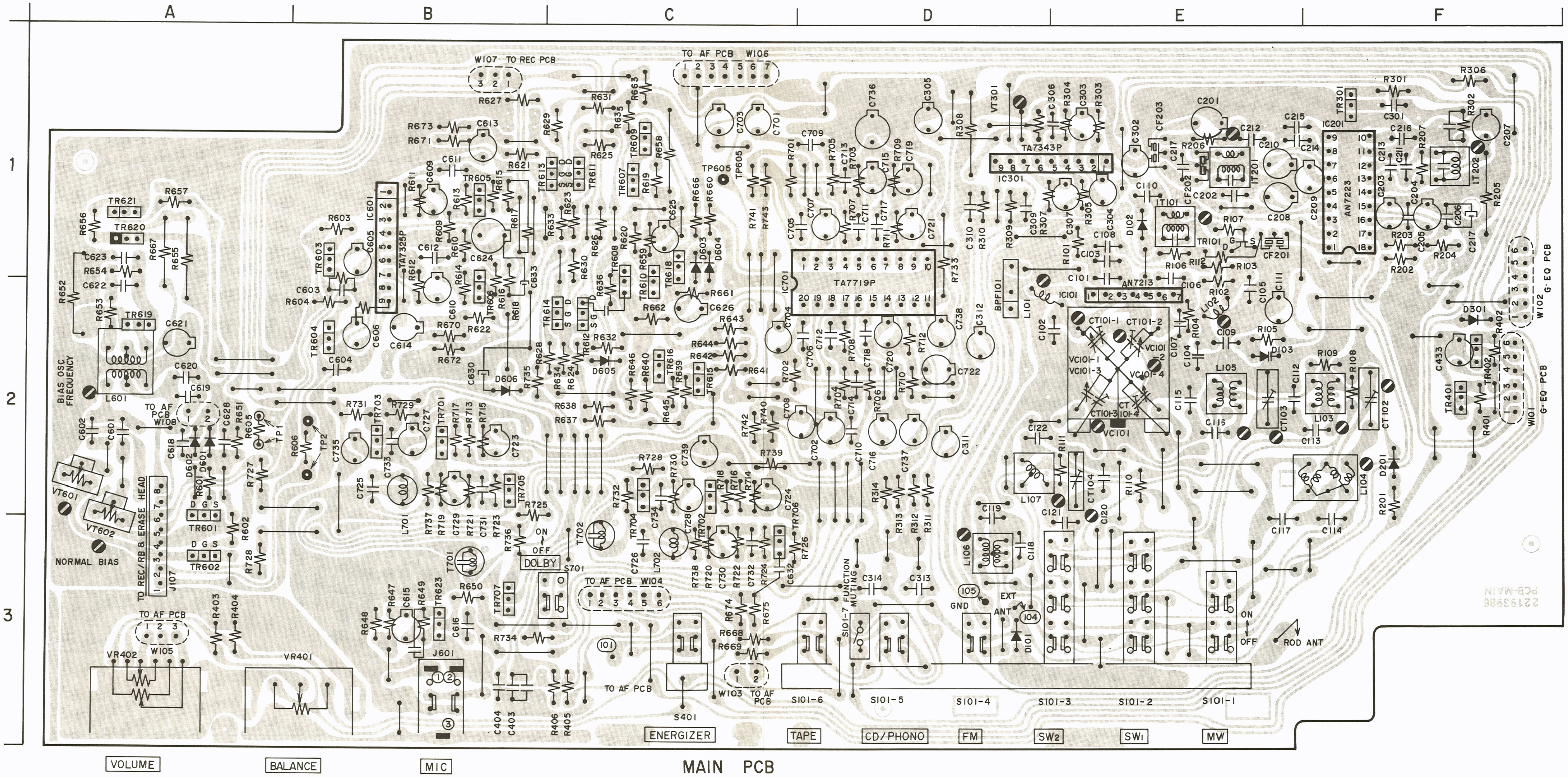
2SA1015GR
2SC1815BL
2SC2120Y
2SC2240



2SD1406Y



2SJ103


A
B
C
D
E
F
1
2
3
W107 TO REC PCB
TO AF PCB W106
TA7343P
IC301
TA7719P
IC701
TA7325P
IC601
AN7213
IC101
AN7223
IC201
G·EQ PCB
W102
W101
BIAS OSC FREQUENCY
TO AF PCB W108
VT601
VT602
NORMAL BIAS
TO REC/RB & ERASE HEAD
J107
TO AF PCB W105
VR402
VR401
J601
DOLBY
ON
OFF
S701
TO AF PCB W104
TO AF PCB
W103 TO AF PCB
S401
FUNCTION MUTING
S101-7
GND
EXT ANT
ROD ANT
S101-6
S101-5
S101-4
S101-3
S101-2
S101-1
ENERGIZER
TAPE
CD/PHONO
FM
SW2
SW1
MW
VOLUME
BALANCE
MIC
2219398G PCB-MAIN

MAIN PCB

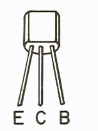
LOCATION OF COMPONENTS

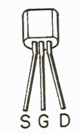
TR's	
TR301	1F
TR401, 402	2F
TR601, 602	3A
TR603, 605	1B
TR604, 606	2B
TR607, 609, 611, 613	1C
TR608, 610, 612,614, 615, 616	2C
TR618	1C
TR620, 621	1A
TR623	3B
TR701, 703, 705	2B
TR702, 704	2C
TR706	3C
TR707	3B

IC's	
IC101	2E
IC201	1F
IC301	1D
IC601	1B
IC701	1D

CONNECTOR's	
W101	2F
W102	1F
W103	3C
W104	3C
W105	3A
W106	1C
W107	1B
W108	2A
(101)	3C
J107	3A

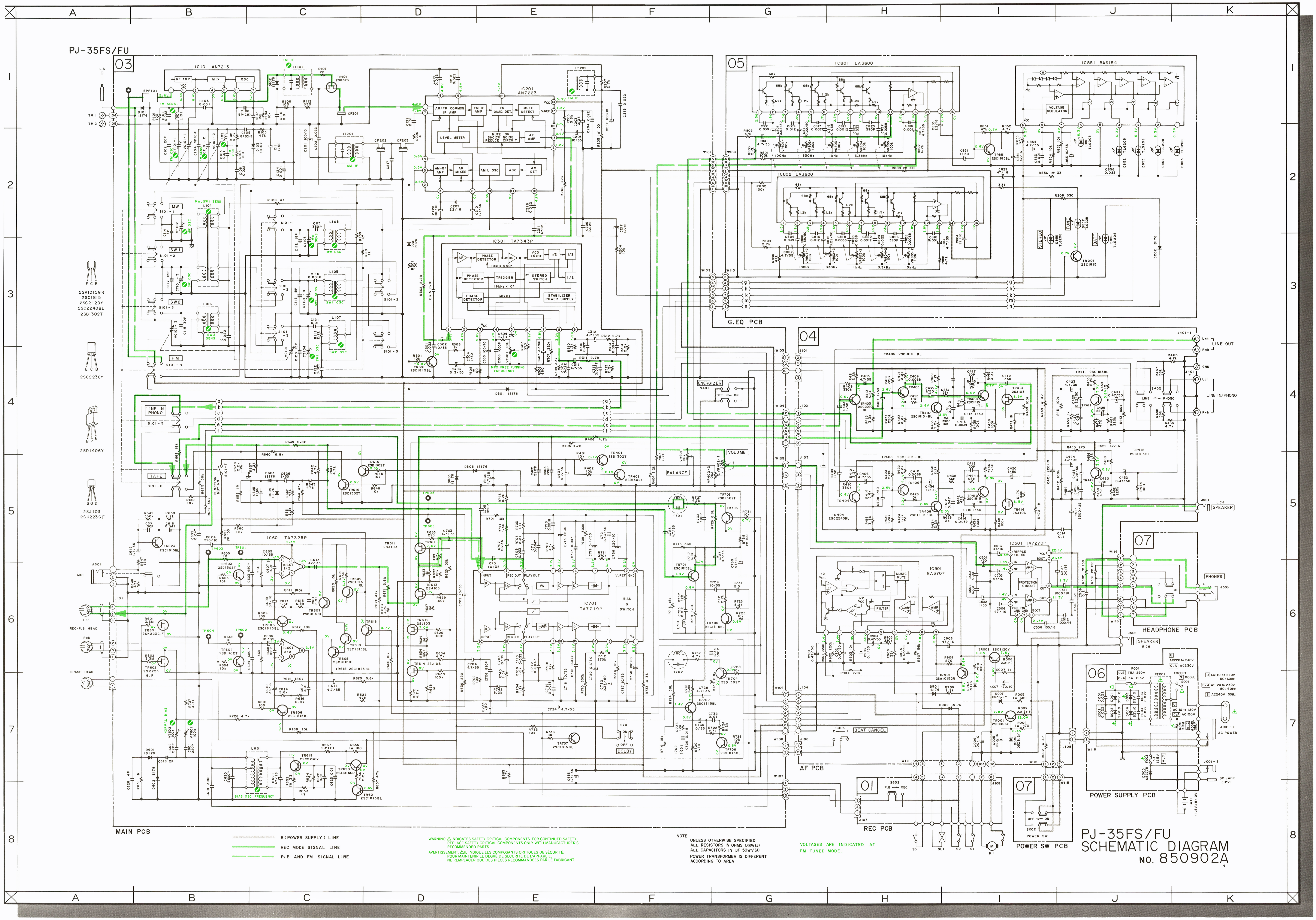
TR301	2SC1815BL
TR401, 402	2SD1302T
TR601, 602	2SK223
TR603, 604	2SD1302T
TR605 to 610	2SC1815BL
TR611 to 614	2SJ103
TR615, 616	2SD1302T
TR618	2SC1815BL
TR620	2SA1015GR
TR621, 623	2SC1815BL
TR701, 702	2SC1815BL
TR703, 704	2SD1302T
TR705 to 707	2SC1815BL


E C B
2SA1015
2SC1815
2SD1302T


S G D
2SJ103
2SK223

L101	FM SENS. (LOW)
L102	FM OSC (LOW)
L103	MW OSC (LOW)
L104	MW, SW1 SENS. (LOW)
L105	SW1 OSC (LOW)
L106	SW2 SENS. (LOW)
L107	SW2 OSC (LOW)
IT101	FM IF
IT201	AM IF
IT202	FM IF
CT101-1	FM OSC (HIGH)
CT101-2	FM SENS. (HIGH)
CT101-3	SW1 OSC (HIGH)
CT101-4	SW1 SENS. (HIGH)
CT102	MW OSC (HIGH)
CT103	MW SENS. (HIGH)
CT104	SW2 OSC (HIGH)
VT301	MPX Free Running Frequency

PJ-35FS/FU



A
B
C
D
E
F
G
H
I
J
K
1
2
3
4
5
6
7
8
03
IC101 AN7213
RF AMP
MIX
OSC
FM IF
IT101
TR101 2SK373
BPF101
FM SENS
MW, SW1 SENS
IC201 AN7223
AM/FM COMMON IF AMP
FM-IF AMP
FM QUAD. DET
MUTE DETECT
LEVEL METER
MUTE OR SHOCK NOISE REDUCE CIRCUIT
AF AMP
AM-RF AMP
AM MIXER
AM L. OSC
ASC
AM DET
AM IF
IT201
IT202
CF201
CF202
CF203
MW
SW1
SW2
FM
MW OSC
SW1 OSC
SW2 OSC
SW2 SENS
S101-1
S101-2
S101-3
S101-4
IC301 TA7343P
PHASE DETECTOR
VCO 76kHz
TRIGGER
STEREO SWITCH
STABILIZER POWER SUPPLY
MPX FREE RUNNING FREQUENCY
TR301 2SC1815BL
D301 1S176
LINE IN PHONO
S101-5
TAPE
S101-6
FUNCTION MUTING
2SA1015GR
2SC1815
2SC2120Y
2SC2240BL
2SD1302T
2SC2236Y
2SD1406Y
2SJ103
2SK223GF
ECB
ECB
BCE
GDS
MIC
J601
J107
REC/P.B HEAD
Lch
Rch
ERASE HEAD
TR601 2SK223G,F
TR602 2SK223 G,F
IC601 TA7325P
TR603 2SD1302T
TR604 2SD1302T
TR605 2SC1815BL
TR606 2SC1815BL
TR607 2SC1815BL
TR608 2SC1815BL
TR609 2SC1815BL
TR610 2SC1815BL
TR611 2SJ103
TR612 2SJ103
TR613 2SJ103
TR614 2SJ103
TR615 2SD1302T
TR616 2SD1302T
TR618 2SC1815BL
TR619 2SC2236Y
TR620 2SA1015GR
TR621 2SC1815BL
TR623 2SC1815BL
L601
BIAS OSC FREQUENCY
NORMAL BIAS
IC701 TA7719P
INPUT
REC OUT
PLAY OUT
V.REF
GND
BIAS & SWITCH
DOLBY
S701
OFF
ON
T701
T702
TR701 2SC1815BL
TR702 2SC1815BL
TR703 2SD1302T
TR704 2SD1302T
TR705 2SC1815BL
TR706 2SC1815BL
TR707 2SC1815BL
TR401 2SD1302T
TR402 2SD1302T
VOLUME
BALANCE
VR402-1
VR402-2
ENERGIZER
S401
05
IC801 LA3600
IC802 LA3600
100Hz
330Hz
1kHz
3.3kHz
10kHz
G.EQ PCB
W101
W102
W109
W110
IC851 BA6154
VOLTAGE REGULATOR
TR851 2SC1815BL
D851 TLR208
D852 TLR208
D853 TLR208
D854 TLR208
D855 TLR208
STEREO
TUNE
BATT
TR201 2SC1815
04
J101
J102
J103
J104
J105
J106
W103
W104
W105
W106
W107
W108
TR403 2SC2240BL
TR404 2SC2240BL
TR405 2SC1815-BL
TR406 2SC1815-BL
TR407 2SC1815-BL
TR408 2SC1815-BL
TR409 2SC1815
TR410 2SC1815BL
TR411 2SC1815BL
TR412 2SC1815BL
TR413 2SJ103
TR414 2SJ103
J401-1
LINE OUT
J401-2
LINE IN/PHONO
S402
LINE
PHONO
GND
J501
SPEAKER
L CH
J502
R CH
IC501 TA7270P
RIPPLE FILTER
BOOT
PROTECTION CIRCUIT
IN
OUT
NF
PRE GND
PW GND
IC901 BA3707
MUSIC MUTE
FILTER
COMP
AMP
V REG
TR901 2SA1015GR
TR001 2SD1406Y
TR002 2SC2120Y
S403
BEAT CANCEL
AF PCB
07
W114
W113
J503
PHONES
HEADPHONE PCB
06
F001
T5A 250V
5A 125V
PT001
AC220 to 240V
AC230V
U AC110 to 240V 50/60Hz
C,A AC120 to 230V 50/60Hz
S AC240V 50Hz
EXCEPT S MODEL
S001
AC110 to 120V
AC120V
AC POWER
J001-1
J001-2
DC JACK (12V)
BATT (1.5V×8=12V)
POWER SUPPLY PCB
01
S602
P.B
REC
J107
J108
REC PCB
S3
SL1
S2
S1
M1
07
W111
W112
W115
W116
S002
OFF
ON
POWER SW
POWER SW PCB
MAIN PCB

B (POWER SUPPLY) LINE

REC MODE SIGNAL LINE

P.B AND FM SIGNAL LINE

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

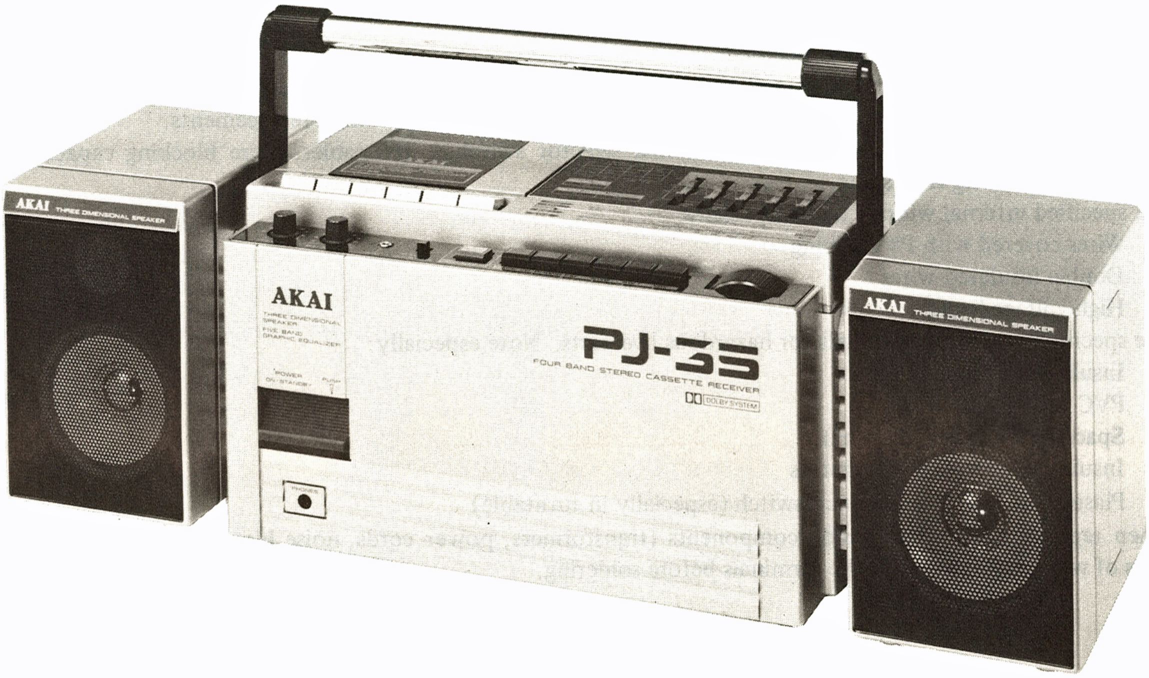
NOTE

UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/8W(J)
ALL CAPACITORS IN μF 50WV(J)
POWER TRANSFORMER IS DIFFERENT
ACCORDING TO AREA

VOLTAGES ARE INDICATED AT FM TUNED MODE.

PJ-35FS/FU
SCHEMATIC DIAGRAM
NO. 850902A

4


AKAI THREE DIMENSIONAL SPEAKER
AKAI
THREE DIMENSIONAL SPEAKER
FIVE BAND GRAPHIC EQUALIZER
POWER ON · STANDBY
PUSH
PHONES
PJ-35
FOUR BAND STEREO CASSETTE RECEIVER
DOLBY SYSTEM
AKAI THREE DIMENSIONAL SPEAKER

FOUR BAND STEREO CASSETTE RECEIVER

MODEL PJ-35FS/FU

SECTION 1 SERVICE MANUAL 3
SECTION 2 PARTS LIST 15

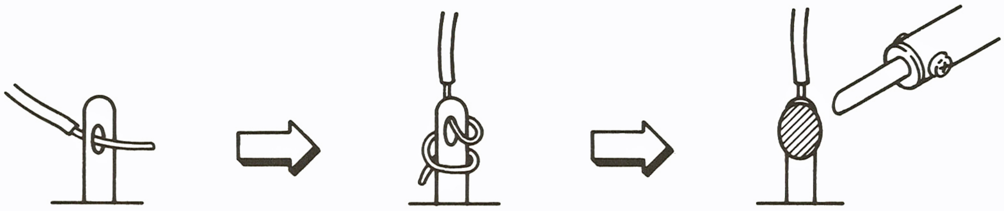
SAFETY INSTRUCTIONS

SAFETY CHECK AFTER SERVICING

Confirm the specified insulation resistance between power cord plug prongs and externally exposed parts of the set is greater than 10 Mohms, but for equipment with external antenna terminals (tuner, receiver, etc.) and is intended for C or A, specified insulation resistance should be more than 2.2 Mohms (ground terminals, microphone jacks, headphone jacks. line-in-out jacks etc.)

PRECAUTIONS DURING SERVICING

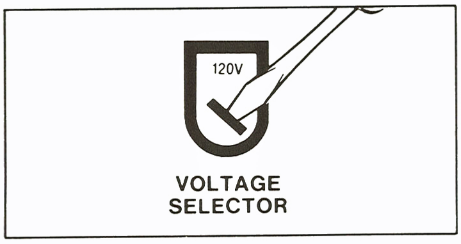
1. Parts identified by the ⚠ symbol parts are critical for safety.
   Replace only with parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation. These must also be replaced only with specified replacements.
   Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
   1) Insulation Tape
   2) PVC tubing
   3) Spacers (Insulating Barriers)
   4) Insulation sheets for transistors
   5) Plastic screws for fixing microswitch (especially in turntable)
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap ends of wires securely about the terminals before soldering.



6. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

VOLTAGE CONVERSION

Models for Canada, Europe, UK and Australia are not equipped with this facility. Each machine is preset at the factory according to destination, but some machines can be set to 110V–120V or 220V–240V, 120V or 230V as required. If your machine's voltage can be converted: Turn the voltage selector, located on the back panel, with a screwdriver until the correct voltage is indicated.



SECTION 1

SERVICE MANUAL

TABLE OF CONTENTS

I. SPECIFICATIONS **4**
II. DISMANTLING OF UNIT **5**
III. CONTROLS **6**
IV. PRINCIPAL PARTS LOCATION **7**
V. MECHANICAL ADJUSTMENT **8**
1. TAPE SPEED ADJUSTMENT 8
2. REC/PB HEAD AZIMUTH ADJUSTMENT 8
VI. AMPLIFIER ADJUSTMENT **9**
1. AMPLIFIER ADJUSTMENT POINT 9
VII. TUNER ADJUSTMENT **10**
1. THE INSTRUMENT CONNECTIONS 10
2. ADJUSTMENT POINTS 11
3. FM ADJUSTMENT 12
4. AM (MW) ADJUSTMENT 12
5. SW ADJUSTMENT 13

For basic adjustments, measuring methods, and operating principles, refer to GENERAL TECHNICAL MANUAL.

I. SPECIFICATIONS

TYPE	Stereo Portable Component

DECK RECEIVER SECTION

FREQUENCY RANGE	FM 88.0–108.0MHz MW 530–1605kHz SW1 3.0–8.0MHz SW2 8.0–22.0MHz

POWER OUTPUT PEAK MUSIC POWER

OUTPUT	Total 70W (for PJ-35 FS)
MAXIMUM POWER OUTPUT	Total 30W (for PJ-35 FU)
RATED POWER OUTPUT	10W x2 (EIAJ 4 ohms)
FTC POWER OUTPUT	7.0W per channel, min. RMS, at 4 ohms from 70Hz to 20kHz, with no more than 10% total harmonic distortion
SPEAKER SYSTEM	Type 3 dimensional–2 way Tweeter 39mm x2 Woofer 92mm x2 Passive Radiator 87mm x2
TRACK SYSTEM	4 track 2 channel stereo
WOW & FLUTTER	0.08% WRMS (JIS)
FREQUENCY RESPONSE	Metal 50Hz to 16,000Hz Normal 50Hz to 13,000Hz
S/N	Better than 50dB (Dolby NR ON: improves up to 10dB above 5kHz)

GENERAL

POWER REQUIREMENTS	DC power source 12V (eight SUM–1, D, R20 or equivalent sized batteries) AC power source 120V, 60Hz for USA nd Canada 220V, 50Hz for Europe except UK 240V, 50Hz for UK and Australia 110V–120V/200V–220V, or 120V/230V, 50/60Hz convertible for other countries.
DIMENSIONS	Total: 538(W) x 165(H) x 187(D) mm (21.2 x 7.4 x 6.5 inches) Cassette receiver: 328(W) x 165(H) x 187 (D) mm (12.9 x 7.4 x 6.5 inches) Speaker: 105(W) x 163.5(H) x 152(D) mm (4.1 x 6.4 x 6.0 inches)
WEIGHT	Total: 5.9 kg (13 lbs) Cassette receiver: 3.4 kg (7.5 lbs) Speaker: 1.25 kg (2.75 lbs)

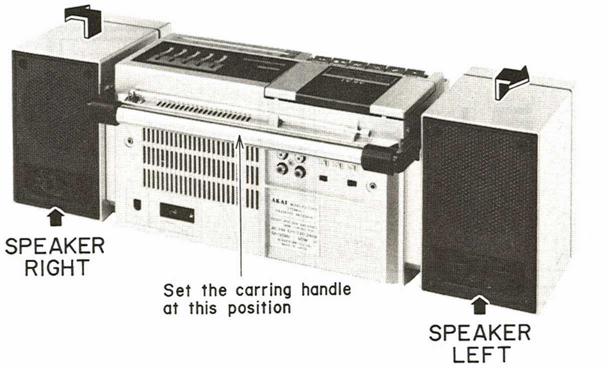
* For improvement purposes, specifications and design are subject to change wihout notice.

* Noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.

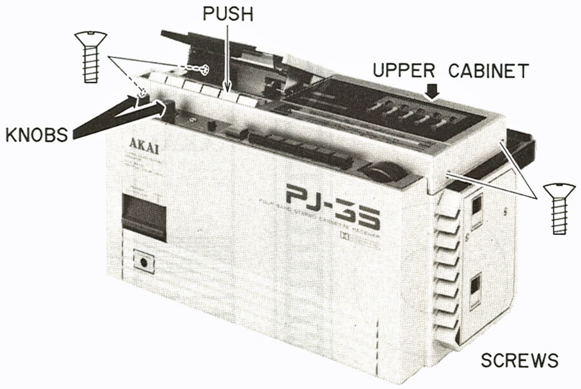
II. DISMANTLING OF UNIT

In case of trouble, etc. necessitating dismantling, please dismantle in the order shown in the photographs. Reassemble in reverse order.

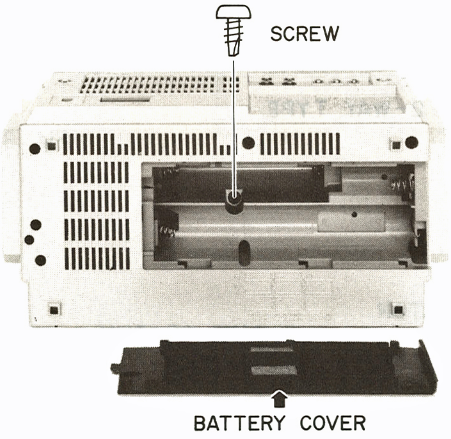
1


SPEAKER RIGHT
Set the carring handle at this position
SPEAKER LEFT

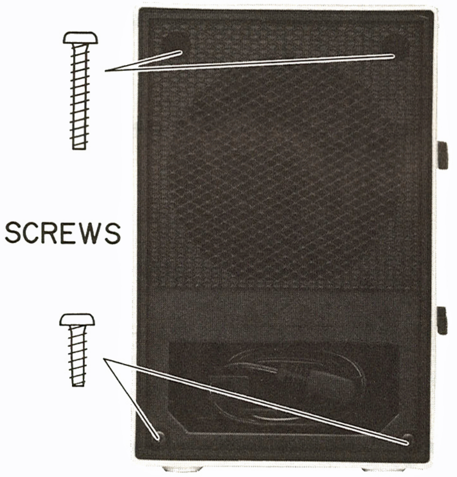
3


PUSH
UPPER CABINET
KNOBS
PJ-35
SCREWS

2

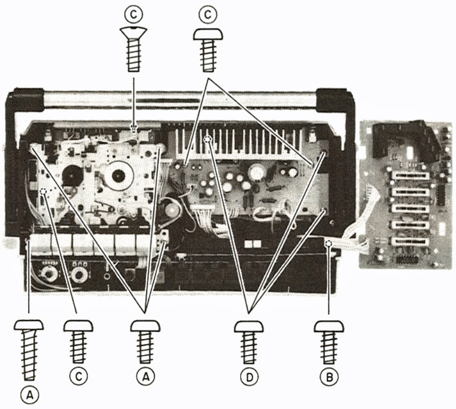

SCREW
BATTERY COVER

4



How to disassemble each block (MECHA Block, AF PCB Block, MAIN PCB Block, POWER Block).

5



1. MECHA Block : Screw group A (x4)
2. AF PCB Block : Screw B
3. MAIN PCB Block : Screw group C (x4)
4. POWER Block : Screw group D (x3)

III. CONTROLS

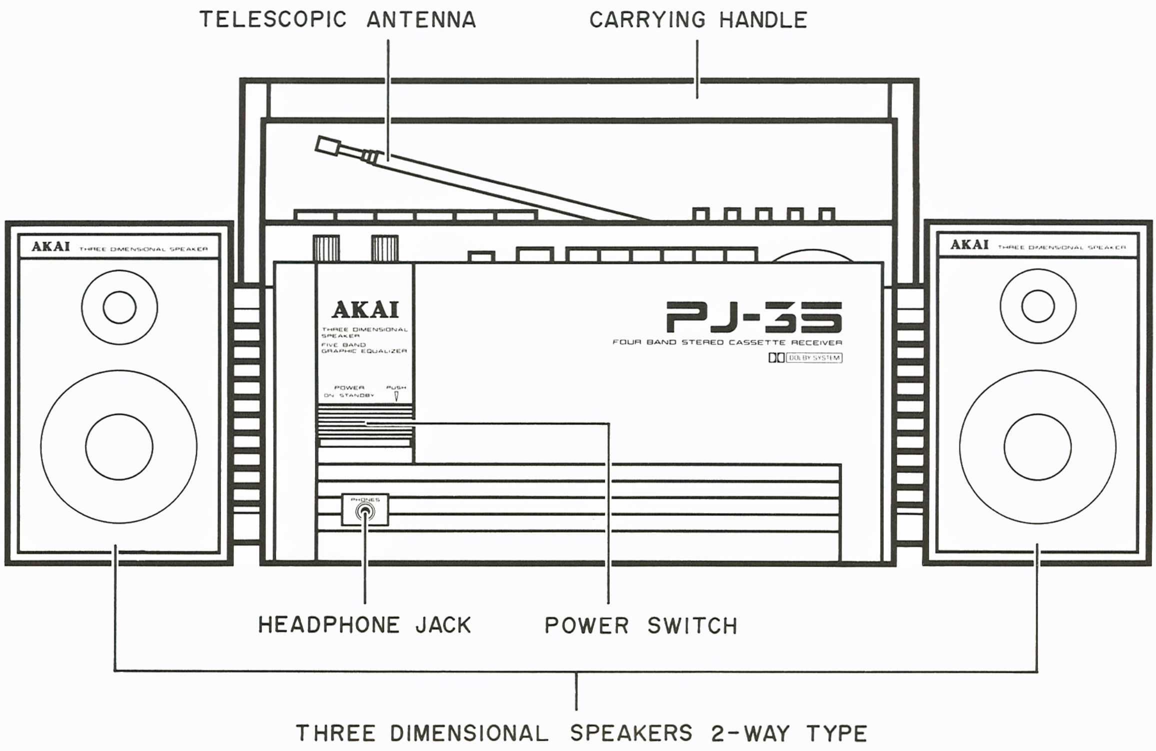

TELESCOPIC ANTENNA
CARRYING HANDLE
AKAI THREE DIMENSIONAL SPEAKER
AKAI
THREE DIMENSIONAL SPEAKER
FIVE BAND GRAPHIC EQUALIZER
POWER ON STANDBY
PUSH
PJ-35
FOUR BAND STEREO CASSETTE RECEIVER
DOLBY SYSTEM
PHONES
HEADPHONE JACK
POWER SWITCH
THREE DIMENSIONAL SPEAKERS 2-WAY TYPE

Fig. 3-1

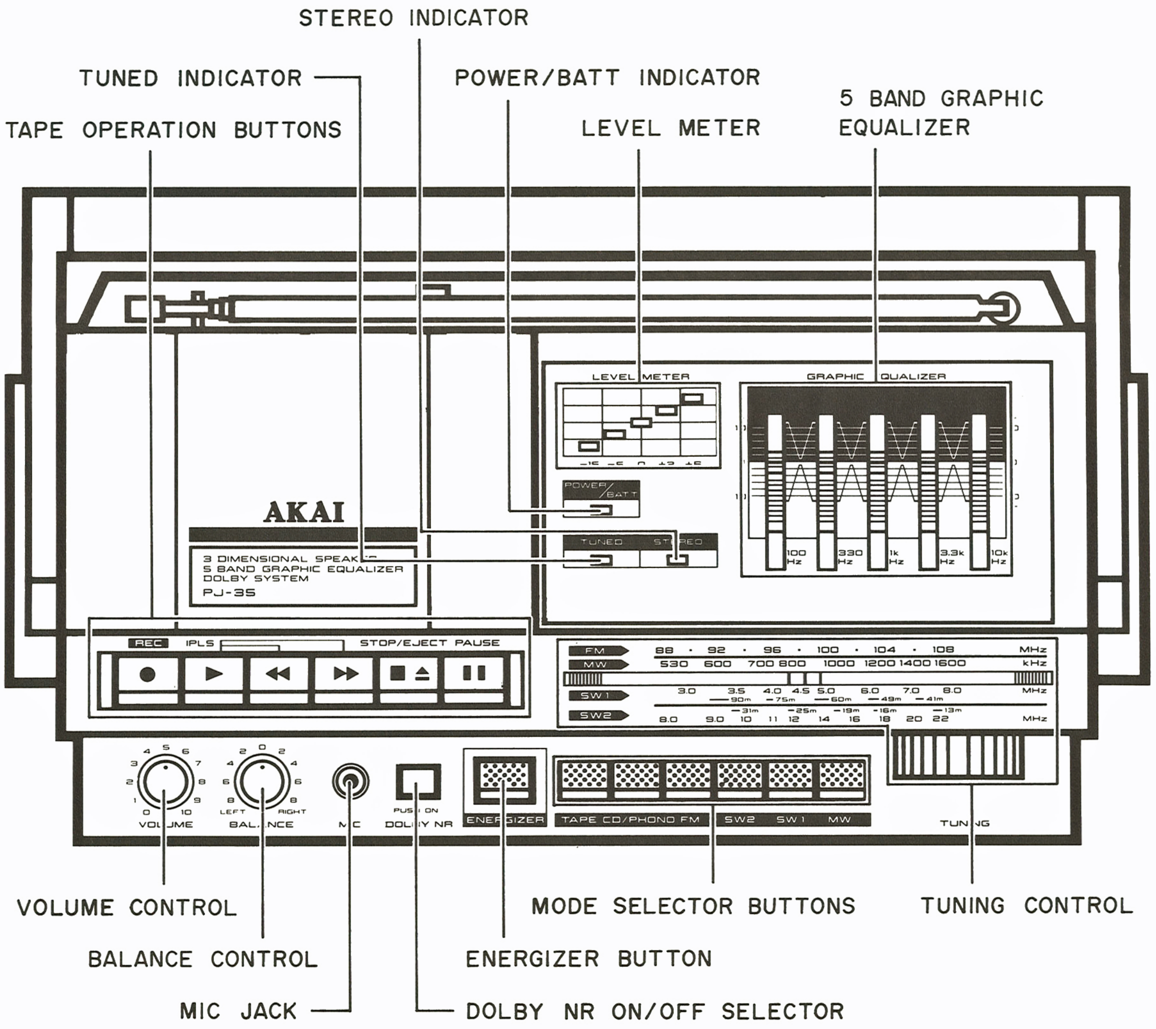

STEREO INDICATOR
TUNED INDICATOR
POWER/BATT INDICATOR
TAPE OPERATION BUTTONS
LEVEL METER
5 BAND GRAPHIC EQUALIZER
LEVEL METER
GRAPHIC EQUALIZER
POWER/BATT
TUNED
STEREO
100 Hz
330 Hz
1k Hz
3.3k Hz
10k Hz
AKAI
3 DIMENSIONAL SPEAKER
5 BAND GRAPHIC EQUALIZER
DOLBY SYSTEM
PJ-35
REC
IPLS
STOP/EJECT
PAUSE
FM
MW
SW1
SW2
88 92 96 100 104 108 MHz
530 600 700 800 1000 1200 1400 1600 kHz
MHz
MHz
VOLUME
LEFT
RIGHT
BALANCE
MIC
PUSH ON
DOLBY NR
ENERGIZER
TAPE CD/PHONO FM
SW2
SW1
MW
TUNING
VOLUME CONTROL
BALANCE CONTROL
MIC JACK
MODE SELECTOR BUTTONS
TUNING CONTROL
ENERGIZER BUTTON
DOLBY NR ON/OFF SELECTOR

Fig. 3-2

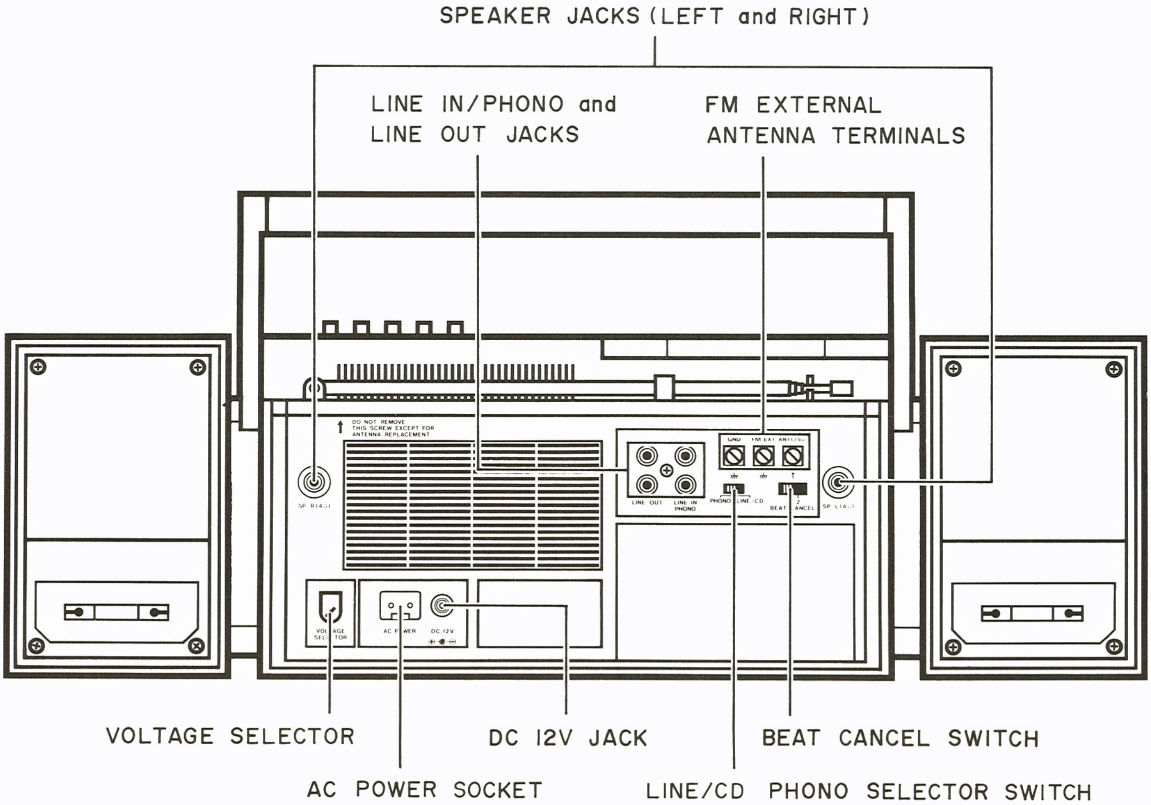

SPEAKER JACKS (LEFT and RIGHT)
LINE IN/PHONO and LINE OUT JACKS
FM EXTERNAL ANTENNA TERMINALS
VOLTAGE SELECTOR
DC 12V JACK
BEAT CANCEL SWITCH
AC POWER SOCKET
LINE/CD PHONO SELECTOR SWITCH

Fig. 3-3

IV. PRINCIPAL PARTS LOCATION

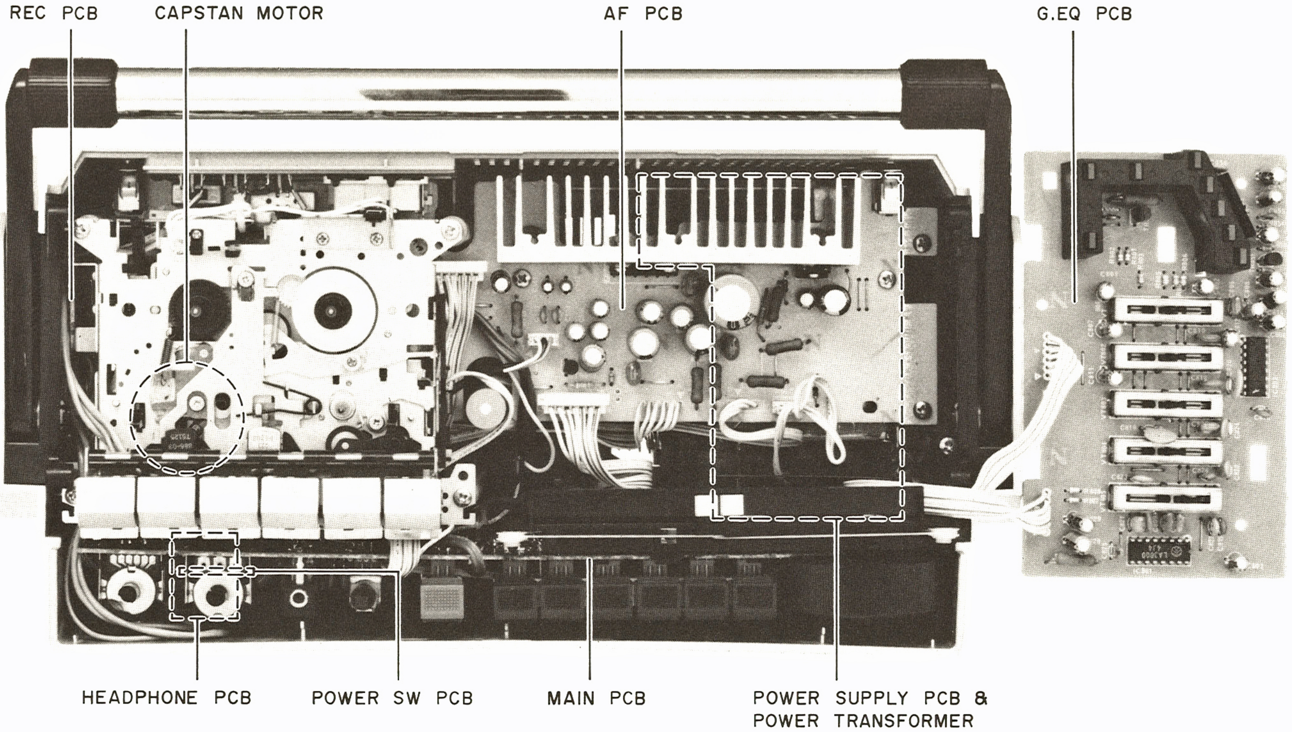

REC PCB
CAPSTAN MOTOR
AF PCB
G.EQ PCB
HEADPHONE PCB
POWER SW PCB
MAIN PCB
POWER SUPPLY PCB &
POWER TRANSFORMER

Fig. 4-1

V. MECHANICAL ADJUSTMENT

5-1. TAPE SPEED ADJUSTMENT

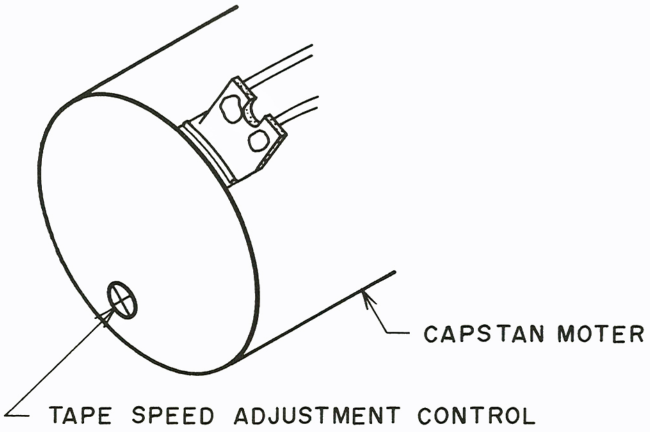


Fig. 5-1

Connect a frequency counter to LINE OUTPUT terminals. Playback a 3150Hz Tape Speed Test Tape (AT-751263) and adjust a tape speed adjustment volume to obtain a tape speed of 3150Hz ±30Hz.

5-2. REC/RB HEAD AZIMUTH ALIGNMENT

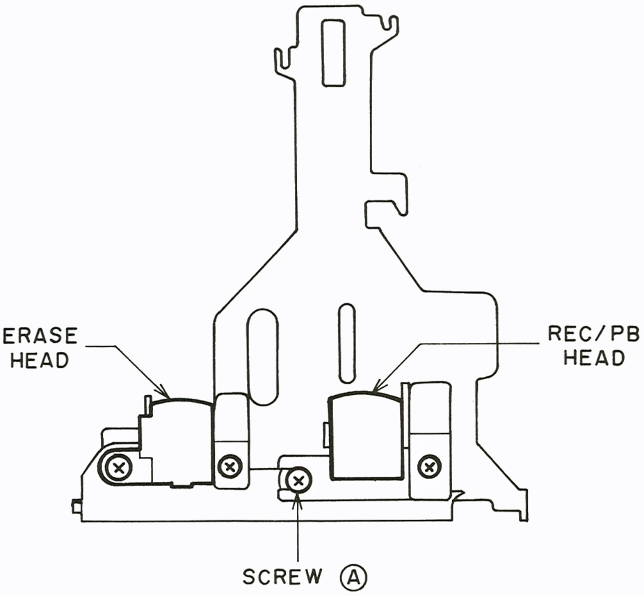


Fig. 5-2

Playback a 10kHz Azimuth Alignment tape (AT-750778) and adjust the screw Ⓐ until the output levels of both channels are maximum.
After adjustment, paint lock the screw Ⓐ.

NOTE:
1. Be sure to clean the heads prior to head adjustment.
2. Be careful not to use a magnetized driver or other magnetized tools in the vicinity of the heads.
3. Be sure to demagnetize the heads with a Head Demagnetizer before and after head adjustment.

VI. AMPLIFIER ADJUSTMENT

6-1. AMPLIFIER ADJUSTMENT POINT

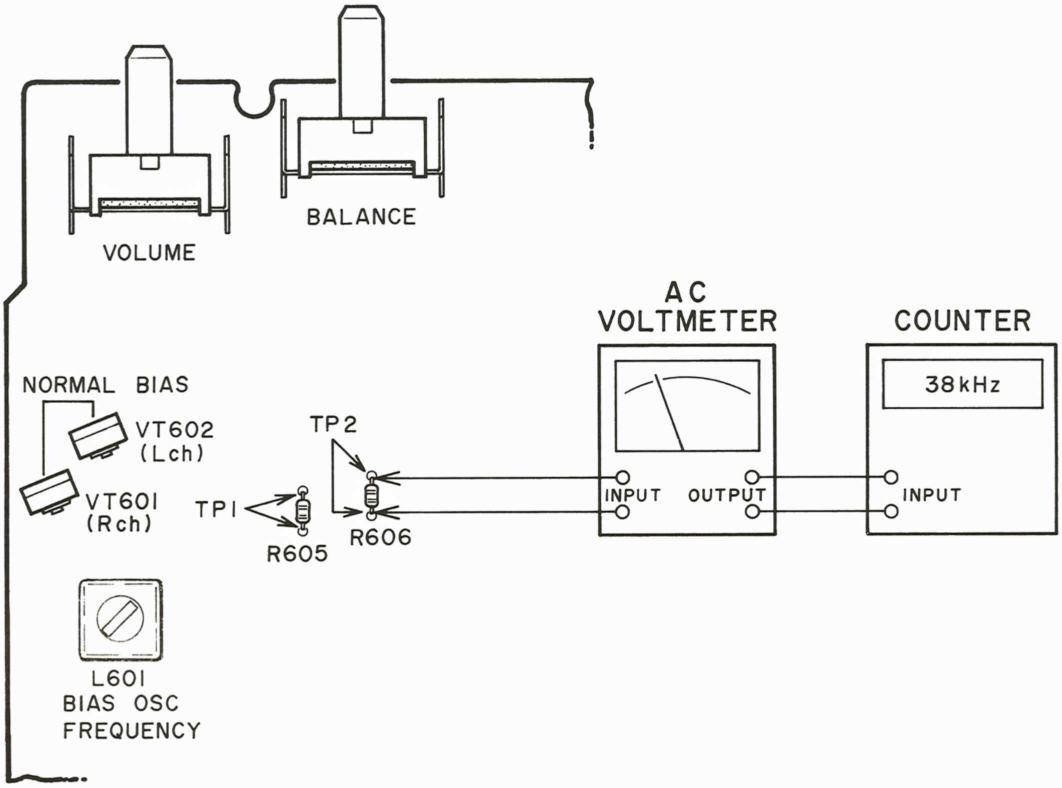

VOLUME
BALANCE
AC VOLTMETER
COUNTER
38kHz
NORMAL BIAS
VT602 (Lch)
VT601 (Rch)
TP2
TP1
R605
R606
INPUT
OUTPUT
INPUT
L601 BIAS OSC FREQUENCY

Fig. 6-1

Step	Adjustment Item	Test Tape & Supply Signal	MODE	Adjustment Part	Result	Remarks
1	BIAS OSC Frequency		REC	L601	83kHz±0.1kHz	○ Set BEAT CANCEL SW to 1. ○ Connect Frequency counter to TP1 or TP2.
2	NORMAL BIAS	NORMAL BLANK TAPE 1kHz, 10kHz −33dBm	REC/ P.B.	VT601 (Rch) VT602 (Lch)	1kHz, 10kHz Flat ±3dBm	○ Dolby NR "ON" ○ See NOTE 2.

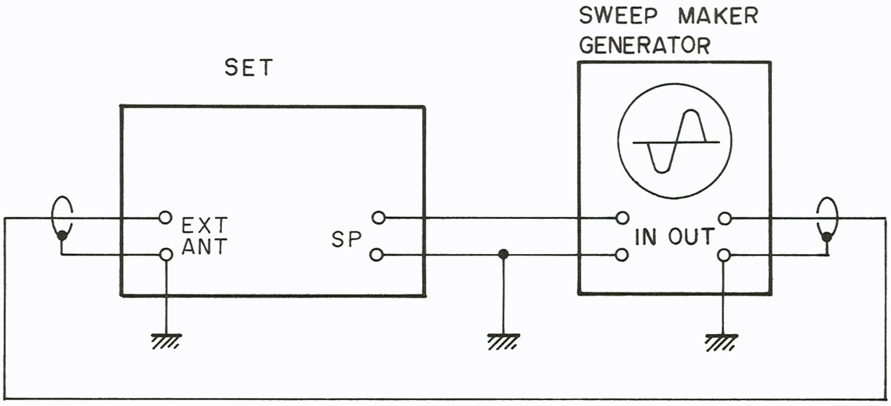
NOTE: 1. Use the following cassette measuring tapes.

Normal Tape :	Maxell	UD	C-60
CrO_2 Tape :	TDK	SA	C-60
Metal Tape :	TDK	MA	C-60

2. The confirmation of CrO_2 and Metal position level should be made.

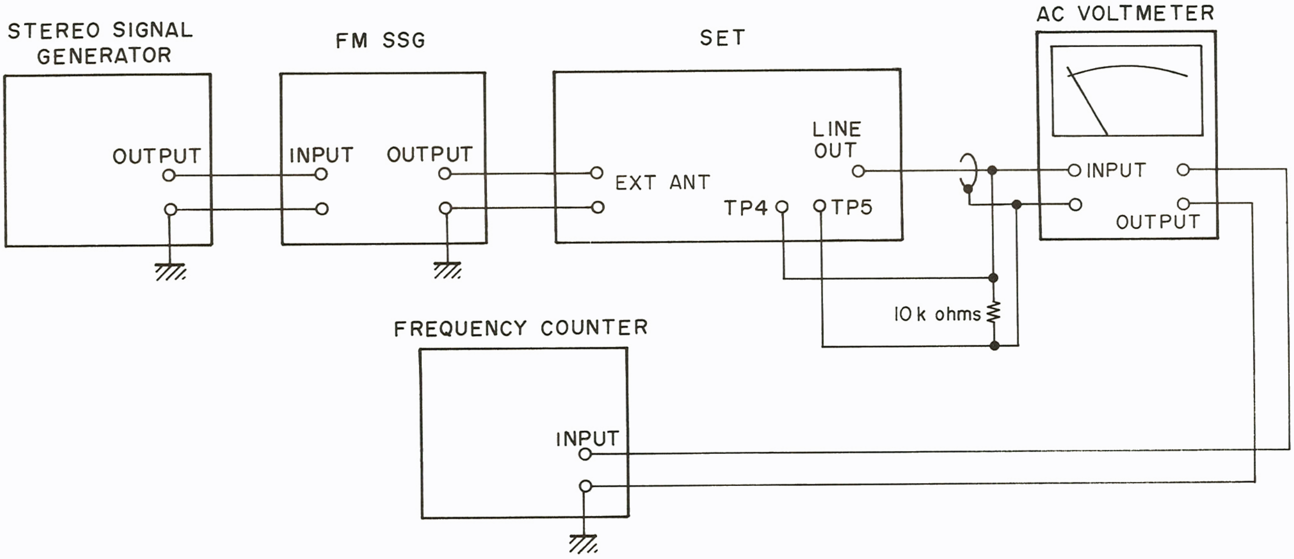
VII. TUNER ADJUSTMENT

7-1. THE INSTRUMENT CONNECTIONS



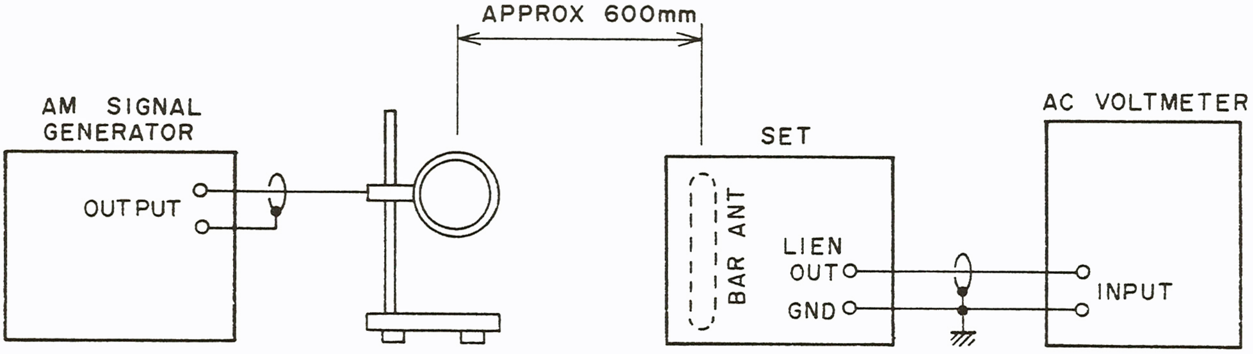
SWEEP MAKER GENERATOR
SET
EXT ANT
SP
IN OUT

Fig. 7-1 FM IF Adjustment



STEREO SIGNAL GENERATOR
OUTPUT
FM SSG
INPUT
OUTPUT
SET
EXT ANT
LINE OUT
TP4
TP5
AC VOLTMETER
INPUT
OUTPUT
10 k ohms
FREQUENCY COUNTER
INPUT

Fig. 7-2 FM Adjustment and Stereo Adjustment



APPROX 600mm
AM SIGNAL GENERATOR
OUTPUT
SET
BAR ANT
LIEN OUT
GND
AC VOLTMETER
INPUT

Fig. 7-3 MW, SW1 Adjustment

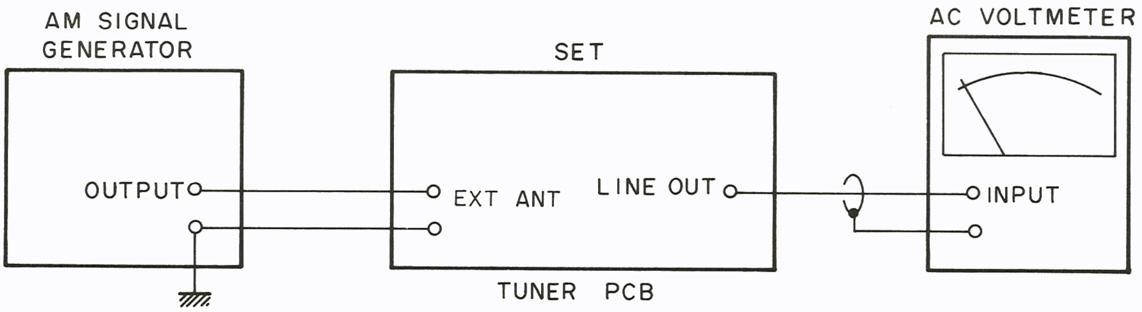

AM SIGNAL GENERATOR
OUTPUT
SET
EXT ANT
LINE OUT
TUNER PCB
AC VOLTMETER
INPUT

Fig. 7-4 SW2 Adjustment

7-2. ADJUSTMENT POINTS

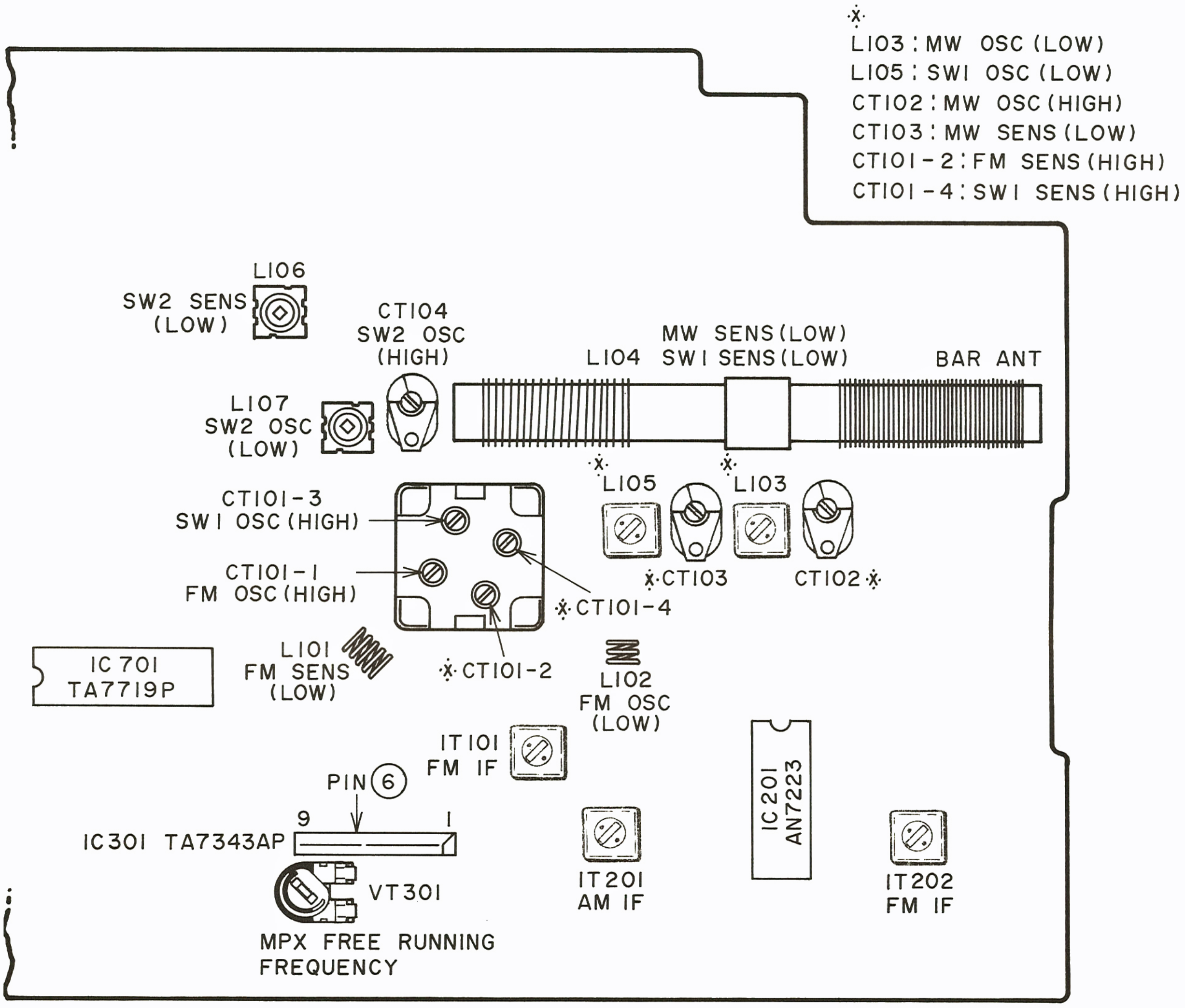
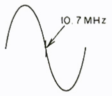

※
L103 : MW OSC (LOW)
L105 : SW1 OSC (LOW)
CT102 : MW OSC (HIGH)
CT103 : MW SENS (LOW)
CT101-2 : FM SENS (HIGH)
CT101-4 : SW1 SENS (HIGH)
L106
SW2 SENS (LOW)
CT104
SW2 OSC (HIGH)
L104
MW SENS (LOW)
SW1 SENS (LOW)
BAR ANT
L107
SW2 OSC (LOW)
※ L105
※ L103
CT101-3
SW1 OSC (HIGH)
CT101-1
FM OSC (HIGH)
※ CT103
CT102 ※
※ CT101-4
IC 701
TA7719P
L101
FM SENS (LOW)
※ CT101-2
L102
FM OSC (LOW)
IT101
FM IF
PIN ⑥
9
1
IC301 TA7343AP
VT301
MPX FREE RUNNING FREQUENCY
IT201
AM IF
IC201
AN7223
IT202
FM IF

Fig. 7-5

7-3. FM ADJUSTMENT

NOTE:

1. Set the S.S.G to 75kHz deviation, 1kHz for C.A.U.S. models 40kHz deviation, 1kHz for B.E.V models.
2. Confirm that the sensitivity margin between Low and High Range sensitivities is within 3dBμ, otherwise readjust Low and High range sensitivity.
3. 0dBμ = 1μV.
4. Set BAND SELECTOR to FM.

Step	Adjustment Item	SSG FREQ/ATT	SET TUNING	Adjustment Part	Result	Remarks
1	FM IF	10.7MHz 60dBμ	SET TO LOW END	IT101 IT202	 Maximum S Curve waveform (Upper waveform symmetricity)	10.7MHz
2	FM OSC (LOW)	87.3MHz 60dBμ	SET TO LOW END	L102	Maximum output	
3	FM OSC (HIGH)	109.0MHz 60dBμ	SET TO HIGH END	CT101-1	Maximum output	
4	For best Result, Repeat step 2 and 3 two or three times.					
5	SENSITIVITY (LOW)	90.0MHz 60dBμ	90.0MHz	L101	Maximum output	
6	SENSITIVITY (HIGH)	106.0MHz 60dBμ	106.0MHz	CT101-2	Maximum output	
7	For best Result, Repeat Step 5 and 6 two or three times.					
8	MPX Free Running Frequency	106.0MHz 60dBμ	106.0 MHz	VT301	38kHz ±0.1kHz	Connect a Frequency counter between Pin ⑥ of IC301 and GND.

7-4. AM (MW) ADJUSTMENT

NOTE:

1. Set the S.S.G to 30% 1kHz of each.
2. Confirm that the sensitivity margin between Low and High Range sensitivities is within 6dBμ, otherwise readjust Low and High Range Sensitivity.
3. Adjust space between small coil and large coil, by moving small coil.
4. Set BAND SELECTOR to MW.

Step	Adjustment Item	SSG FREQ/ATT	SET TUNING	Adjustment Part	Result	Remarks
1	AM IF	460kHz 60dBμ	SET TO LOW END	IT201	Maximum output	
2	MW OSC (LOW)	515kHz 60dBμ	SET TO LOW END	L103	Maximum output	
3	MW OSC (HIGH)	1650kHz 60dBμ	SET TO HIGH END	CT102	Maximum output	
4	For best Result, Repeat Step 2 and 3 two or three times.					
5	SENSITIVITY (LOW)	600kHz 60dBμ	600kHz	(MW BAR ANT) (See NOTE 3)	Maximum output	
6	SENSITIVITY (HIGH)	1400kHz 60dBμ	1400kHz	CT103	Maximum output	
	For best Result, repeat Step 5 and 6 two or three times.					

7-5. SW ADJUSTMENT

NOTE:

1. Set the S.S.G to 30% 1kHz of each.
2. Confirm that the sensitivity margin between Low and High Range sensitivities is within 6dBμ, otherwise readjust Low and High Range Sensitivity.
3. Adjust space between small coil and large coil, by moving small coil.
4. Set BAND SELECTOR to SW.

Step	Adjustment Ietm	SSG FREQ/ATT	SET TUNING	Adjustment Part	Result	Remarks
1	SW1 OSC (LOW)	2.8MHz 60dBμ	SET TO LOW END	L105	Maximum output	Set BAND SELECTOR to SW1
2	SW1 OSC (HIGH)	8.2MHz 60dBμ	SET TO HIGH END	CT101-3	Maximum output	
3	For best Result, Repeat Step 1 and 2 two or three times.					
4	SW1 SENSITIVITY (LOW)	3.5MHz 60dBμ	3.5MHz	(SW1 BAR ANT) (See NOTE 3)	Maximum output	
5	SW1 SENSITIVITY (HIGH)	7.5MHz 60dBμ	7.5MHz	CT101-4	Maximum output	
6	For best Result, Repeat Step 4 and 5 two or three times.					
7	SW2 OSC (LOW)	7.8MHz 60dBμ	SET TO LOW END	L107	Maximum output	Set BAND SELECTOR to SW2
8	SW2 OSC (HIGH)	23.0MHz 60dBμ	SET TO HIGH END	CT104	Maximum output	
9	For best Result, Repeat Step 7 and 8 two or three times.					
10	SW2 SENSITIVITY (LOW)	8.0MHz 60dBμ	8.0 MHz	L106	Maximum output	

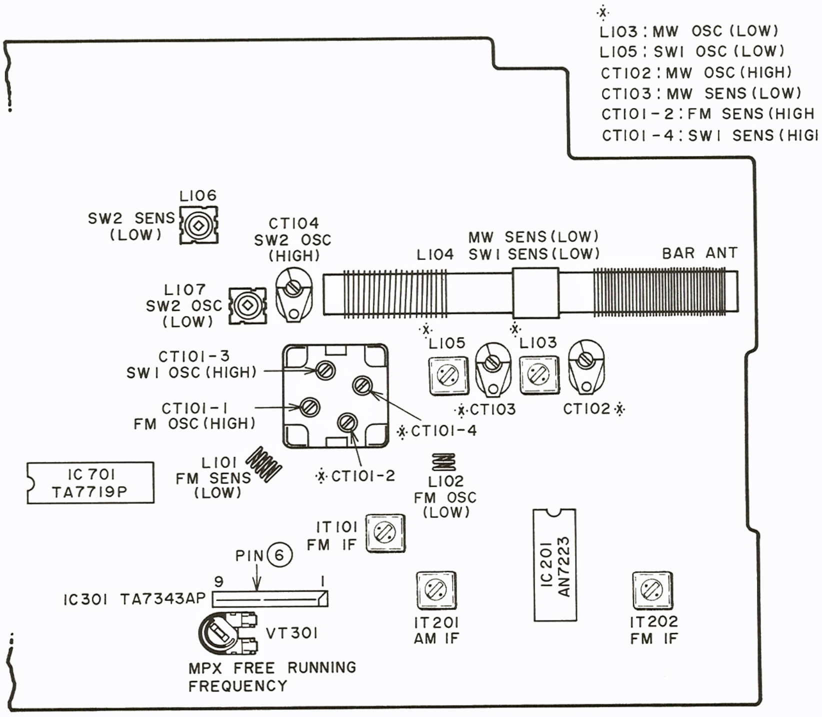

※
L103 : MW OSC (LOW)
L105 : SW1 OSC (LOW)
CT102 : MW OSC (HIGH)
CT103 : MW SENS (LOW)
CT101-2 : FM SENS (HIGH
CT101-4 : SW1 SENS (HIGI
L106
SW2 SENS (LOW)
CT104
SW2 OSC (HIGH)
L104
MW SENS (LOW)
SW1 SENS (LOW)
BAR ANT
L107
SW2 OSC (LOW)
※L105
※L103
CT101-3
SW1 OSC (HIGH)
CT101-1
FM OSC (HIGH)
※CT103
CT102※
※CT101-4
IC701
TA7719P
L101
FM SENS (LOW)
※CT101-2
L102
FM OSC (LOW)
IT101
FM IF
PIN⑥
9
1
IC301 TA7343AP
VT301
MPX FREE RUNNING FREQUENCY
IT201
AM IF
IC201
AN7223
IT202
FM IF

Fig. 7-6

—MEMO—

SECTION 2

PARTS LIST

TABLE OF CONTENTS

RECOMMENDED SPARE PARTS 17
1. MECHA BLOCK 19
2. PC BOARD BLOCK 20
3. MAIN PC BOARD 20
4. AF PC BOARD 21
5. G.EQ PC BOARD 21
6. POWER SUPPLY PC BOARD 21
7. FINAL ASSEMBLY BLOCK 23
INDEX 24

Resistor and Capacitor which is not listed in this parts list, please refer to COMMON LIST FOR SERVICE PARTS.

ATTENTION

1. When placing an order for parts, be sure to list the parts no. model no., and description of each part. If any of this information is omitted, there are instances in which parts cannot be shipped or the wrong parts will be delivered.
2. Please be careful not to make a mistake in the parts no. If the parts no. is in error, a part different from the one ordered may be delivered.
3. Because part numbers and part definitions and supply in the Preliminary Parts List may have been the subject of changes, please use this parts list for all future reference.

HOW TO USE THIS PARTS LIST

1. This Parts List shows those parts which are considered necessary for repairs. Other parts, such as resistors and capacitors, are shown in the "Common List for Service Parts" from which these parts should be selected and parts.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the parts list
   a) Mechanism Block
   b) P.C Board Block

2. HEAD BASE BLOCK

REF. NO.	PART NO.	DESCRIPTION
2-1x	BH-T2023A320A	HEAD BASE BLOCK GX-F66R
2-2	HP-H2206A010A	HEAD R/P PR4-8FU C
2-3	ZS-477876	PAN20×03STL CMT
2-4	ZS-536488	BID20×08STL CMT
2-5	ZG-402895	CS ANGLE ADJUST SPRING

SP (Service Parts) Classification

A small "x" indicates the inability to show that particular part in the Photo or Illustration.

This number corresponds with the individual parts index number in that figure

This number corresponds with the Figure Number

6. SYS. CON. P C BOARD BLOCK

REF. NO.	PART NO.	DESCRIPTION
6-1	BA-T2034A070A	PC SYS CON BLK GX-F44R
6-IC1	EI-324536	IC HD14049BP
6-IC2	EI-336801	IC MB8841-564M
6-IC3	EI-331661	IC SN7405N
6-IC4	EI-336725	IC M54527P
6-TR1to4	ET-200985	TR 2SC2603 F,G
6-TR5to28	ET-554657	TR 2SA733A P,Q
6-D1	ED-318292	D SILICON H 1S2473T-77 T26
6-D2to4	ED-308952	D GERMA V 1K34A-LR F07
6-D5to10	ED-318292	D SILICON H 1S2473T-77 T26
6-X1	EI-318384	OSC X'TAL NC-18C 3.579545MHZ

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

5. The kind of part and its installation position can both be determined by the Part Number. To determine where a part number is listed, utilize the Parts Index at the end of the Parts List. It is necessary first of all to find the Part Number. This can be accomplished by using the Reference Number listed at the right of the part number in the Parts Index.

WARNING

⚠ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS

AVERTISSEMENT

⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LÉ FABRICANT

RECOMMENDED SPARE PARTS

Because, if the parts listed below are on hand, almost any repair can be accomplished, we suggest that you stock these Recommended Spare Parts Items.

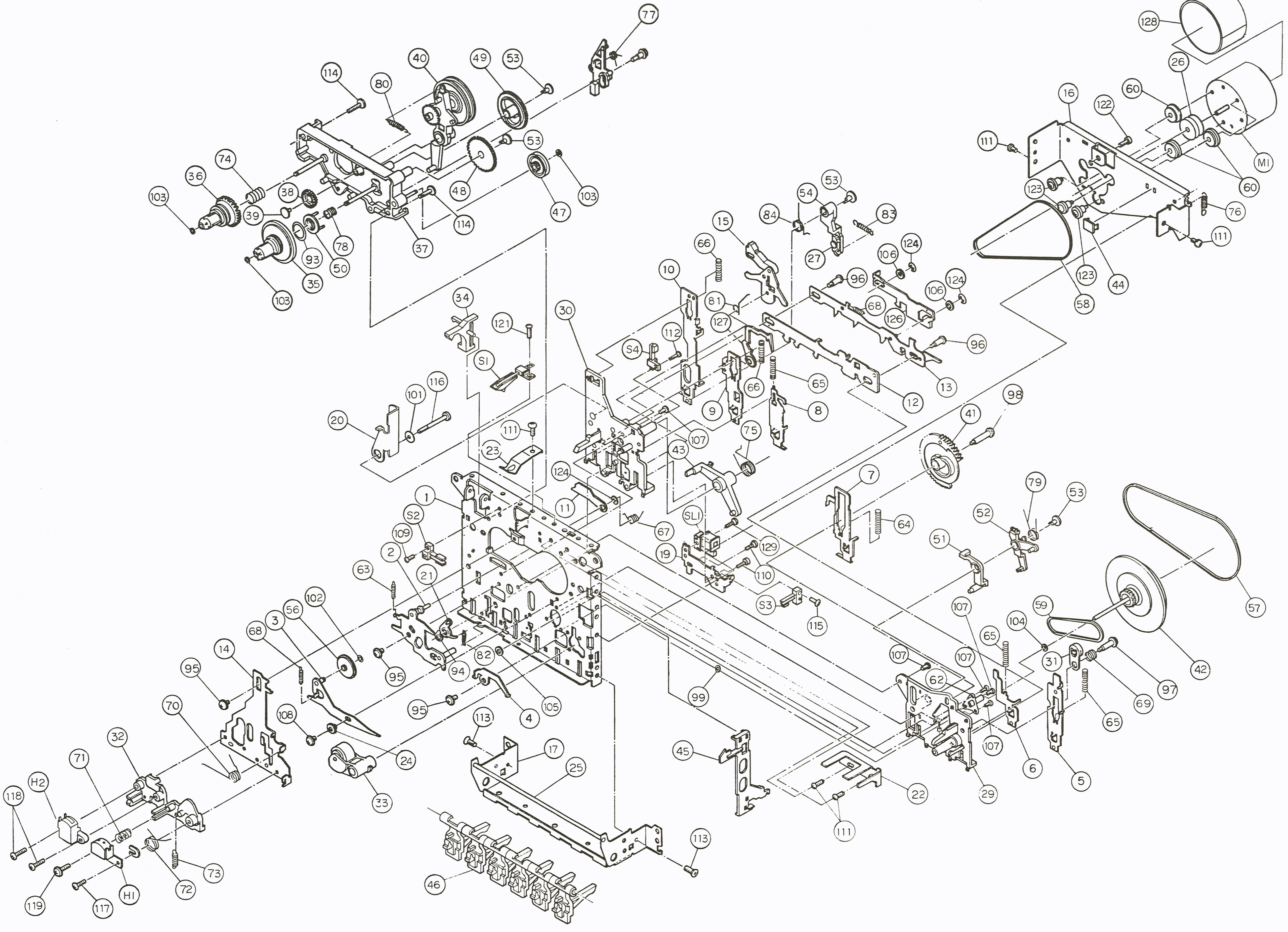
REF. NO.	PART NO.	DESCRIPTION
1 N	BF-716173	FLYWHEEL ASSY (F)
2	BL-712799	PINCH ROLLER ARM ASSY
3 N	BM-715113	⚠ MOTOR ASSY W/PULLEY
4 N	BR-715919	SUPPLY REEL TABLE BLK HX-M10
5 N	BR-715918	TAKE-UP REEL TABLE BLK HX-M10
6 N	BT-715153	⚠ TRANS POWER 22224719 [U]
7 N	BT-716145	⚠ TRANS POWER 22224720 C,A [C,A]
8 N	BT-716146	⚠ TRANS POWER 22224722 S,B [B,S]
9 N	BT-716147	⚠ TRANS POWER 22224723 E,V[E,V]
10	EC-713202	C S-FIX
11	EC-706605	C S-FIX 1R
12	ED-707920	⚠ D SILICON S2V10X
13	ED-749384	D LED TLG208
14	ED-749382	D LED TLR208
15	ED-706596	D SILICON KB167
16	ED-306724	D SILICON S5277B 100/1.0A
17	ED-713348	D SILICON 1SS176
18	ED-713919	D SILICON 1SS178
19	ED-337606	D ZENER H 05Z6.2 Y
20	ED-347149	D ZENER H 05Z8.2 Y
21 N	EE-716030	ANT ROD
22 N	EC-716157	VC POLY VC-4-20/335 [FU,FS]
23 N	EC-716460	VC POLY VC-4-20/335 [FL]
24	EI-713190	IC AN7213
25	EI-351848	IC AN7273
26 N	EI-711984	IC BA3707
27 N	EI-715106	IC BA6154
28 N	EI-715105	IC LA3600
29	EI-713942	IC TA7270P
30	EI-709447	IC TA7325P
31	EI-708420	IC TA7343P
32	EI-713916	IC TA7719P
33 N	EO-709407	COIL IFT FM-D
34 N	EO-716202	SOLENOID
35	ER-702368	⚠ R FUSE 1/4W 2R2J
36 N	ES-715111	⚠ SW PUSH
37 N	ES-715155	⚠ SW SELECTOR [U]
38 N	ES-716144	⚠ SW SELECTOR [C,A]
39 N	ES-715945	SW LEAF LSA-1119C
40 N	ES-716201	SW LEAF LSA-1120F-1N
41 N	ES-715944	SW LEAF LSA-1132EAU
42	ES-713178	SW LSA-1120-YN
43 N	ES-715099	SW PUSH [FUNCTION]
44 N	ES-716143	SW PUSH
45	ES-713971	SW SLIDE [REC SW]
46 N	ES-716158	SW SLIDE [PHONO-LINE/CD]
47 N	ES-716159	SW SLIDE [BEAT]
48	ET-7328844	⚠ TR 2SC2120 O,Y
49	ET-349285	⚠ TR 2SD1406 Y
50	ET-353734	TR FET 2SJ103 GR,BL
51	ET-336864	TR FET 2SK223 F
52	ET-308867	TR 2SA1015 O,Y,GR
53	ET-328861	TR 2SA562TM O,Y
54	ET-330225	TR 2SC1815 BL
55	ET-306719	TR 2SC2236 O,Y
56	ET-307195	TR 2SC2240 GR,BL
57	ET-338565	TR 2SD1302 R,S
58 N	EV-715098	R S-FIX 103
59	EV-715103	R S-FIX 103 [FL]
60 N	EV-716148	R S-FIX 104 [FU,FS]
61	EV-715108	VR ROTARY 103
62	EV-715109	VR ROTARY 503
63 N	EV-716000	VR SLIDE 503
64 N	HE-715115	HEAD E
65 N	HP-715114	HEAD R/P
66	MB-712818	BELT AUTO
67 N	MB-716183	BELT DRIVE
68 N	MB-716184	BELT FR
69	MI-715935	CLUTCH ARM ASSY
70	MI-715920	CLUTCH AUTO
71	MI-712817	IDLER PLAY
72	MI-712812	PULLEY AUTO
73	MZ-712813	GEAR AUTO
74	MZ-711710	GEAR C
75	MZ-712814	GEAR CAM AUTO
76	MZ-712804	GEAR FF

"NOTE" N: New Parts

SYMBOL FOR DESTINATION

FU [A]	:	AAL (U.S.A.)
FL [B]	:	UK (England)
FU [C]	:	CSA (Canada)
FL [E]	:	CEE (Europe)
FS [S]	:	SAA (Australia)
FS [U]	:	U/T (Universal Area)
FL [V]	:	VDE (West Germany)

MECHA BLOCK



MI
S4
SI
S2
SLI
S3
H2
HI

1. MECHA BLOCK

REF. NO.	PART NO.	DESCRIPTION
	MECHA BLOCK	
1-1	BB-715112	MECHA BLK
1-15	ML-716169	ARM RC ASSY
1-23	ZG-712822	SP PACK
1-27	MS-716170	SHAFT CHIP
1-31	MZ-716171	CAM PAUSE
1-32	HZ-716172	BASE HEAD
1-33	BL-712799	PINCH ROLLER ARM ASSY
1-34	ML-712806	SENSOR REC
1-35	BR-715918	TAKE-UP REEL TABLE BLK HX-M10
1-36	BR-715919	SUPPLY REEL TABLE BLK HX-M10
1-38	MZ-712804	GEAR FF
1-39	MZ-749256	BUSH
1-40	MI-715935	CLUTCH ARM ASSY
1-41	MZ-711710	GEAR C
1-42	BF-716173	FLYWHEEL ASSY (F)
1-43	ML-716175	ARM LOCK (H)
1-44	ZW-716176	SPACER CAPSTAN
1-45	ML-716177	LEVER EJECT (F)
1-46	SB-716178	BUTTON LEVER
1-47	MI-712812	PULLEY AUTO
1-48	MZ-712813	GEAR AUTO
1-49	MZ-712814	GEAR CAM AUTO
1-50	MI-715920	CLUTCH AUTO
1-51	ML-716179	ARM AUTO (B)
1-52	ML-716180	ARM AUTO LOCK
1-53	ZW-716181	BUSH
1-54	ML-716182	ARM SOLENOID
1-56	MI-712817	IDLER PLAY
1-57	MB-716183	BELT DRIVE
1-58	MB-716184	BELT FR
1-59	MB-712818	BELT AUTO
1-60	MB-715936	CUSHION MOTOR
1-62	MV-716186	MAIN CASE
1-67	ZG-716187	SP REC LEVER
1-68	ZG-716188	SP CAM
1-69	ZG-716189	SP PAUSE CAM
1-70	ZG-716190	SP HEAD CHASSIS
1-71	ZG-749268	SP HEAD
1-72	ZG-715921	SP PINCH ROLLER
1-73	ZG-715940	SP HEAD RETURN
1-74	ZG-716191	SP BACK TENSION
1-75	ZG-716192	SP LOCK ARM (H)
1-76	ZG-716193	SP EJECT LEVER
1-77	ZG-716194	SP AUTO SENSOR
1-78	ZG-716195	SP AUTO CLUTCH
1-79	ZG-716197	SP AUTO LOCK ARM
1-80	ZG-715922	SP CLUTCH ARM
1-81	ZG-716198	SP RC ARM
1-83	ZG-716199	SP ARM SOLENOID
1-84	ZG-716200	SP TRIGGER ARM
1-93	TC-712823	FELT AUTO CLUTCH
1-96	ZS-715982	SCREW (B)
1-97	ZS-716203	SCREW SPECIAL (C)
1-98	ZS-716204	SCREW SPECIAL (D)
1-103	ZW-716206	PW17×035×025PSL
1-114	ZS-707587	T2BID26×08STL CR3
1-117	ZS-536488	BID20×08STL CMT
1-118	ZS-749293	BID20×09STL CMT TW
1-119	ZS-749293	BID20×09STL CMT TW
1-123	ZS-715943	SCREW SPECIAL
1-127	ML-716205	ARM TRIGGER
1-M1	BM-715113	⚠ MOTOR ASSY W/PULLEY
1-H1	HP-715114	HEAD R/P
1-H2	HE-715115	HEAD E
1-S1	ES-715944	SW LEAF LSA-1132EAU
1-S2	ES-713178	SE LSA-1120-YN
1-S3	ES-716201	SW LEAF LSA-1120F-1N
1-S4	ES-715945	SW LEAF LSA-1119C
1-SL1	EP-716202	SOLENOID

REF. NO.	PART NO.	DESCRIPTION
	REC PC BOARD	
1-S602	ES-713971	SW SLIDE [REC SW]

Note:
Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

2. PC BOARD BLOCK

REF. NO.	PART NO.	DESCRIPTION
2-1A	BA-716654	PC MAIN BLK PJ-35FS/FU
2-1B	BA-716655	PC MAIN BLK PJ-35FL
2-2A	BA-716653	PC AF BLK PJ-35FS (U)
2-2B	BA-716652	PC AF BLK PJ-35FU (C,A)
2-2C	BA-716651	PC AF BLK PJ-35FL (E,V,B)
2-2D	BA-716650	PC AF BLK PJ-35FS (S)

NOTE:

(1) PC MAIN BLK consists of following PC BOARDS.
- MAIN PC BOARD
- G.EQ PC BOARD
- REC PC BOARD

(2) PC AF BLK consists of following PC BOARDS.
- AF PC BOARD
- POWER SUPPLY PC BOARD
- POWER SW PC BOARD
- HEAD PHONE PC BOARD

3. MAIN PC BOARD

REF. NO.	PART NO.	DESCRIPTION
3-IC101	EI-713190	IC AN7213
3-IC201	EI-351848	IC AN7273
3-IC301	EI-708420	IC TA7343P
3-IC601	EI-709447	IC TA7325P
3-IC701	EI-713916	IC TA7719P
3-TR201	ET-330255	TR 2SC1815 BL
3-TR301	ET-330225	TR 2SC1815 BL
3-TR401	ET-338565	TR 2SD1302 R,S
3-TR402	ET-338565	TR 2SD1302 R,S
3-TR601	ET-336864	TR FET 2SK223 F
3-TR602	ET-336864	TR FET 2SK223 F
3-TR603	ET-338565	TR 2SD1302 R,S
3-TR604	ET-338565	TR 2SD1302 R,S
3-TR605	ET-330225	TR 2SC1815 BL
3-TR606	ET-330225	TR 2SC1815 BL
3-TR607	ET-330225	TR 2SC1815 BL
3-TR608	ET-330225	TR 2SC1815 BL
3-TR609	ET-330225	TR 2SC1815 BL
3-TR610	ET-330225	TR 2SC1815 BL
3-TR611	ET-353734	TR FET 2SJ103 GR,BL
3-TR612	ET-353734	TR FET 2SJ103 GR,BL
3-TR613	ET-353734	TR FET 2SJ103 GR,BL
3-TR614	ET-353734	TR FET 2SJ103 GR,BL
3-TR615	ET-338565	TR 2SD1302 R,S
3-TR616	ET-338565	TR 2SD1302 R,S
3-TR618	ET-330225	TR 2SC1815 BL
3-TR619	ET-306719	TR 2SC2236 O,Y
3-TR620	ET-328861	TR 2SA562TM O,Y
3-TR621	ET-330225	TR 2SC1815 BL
3-TR623A	ET-330225	TR 2SC1815 BL [FU,FS]
3-TR623B	ET-307195	TR 2SC2240 GR,BL [FL]
3-TR701	ET-330225	TR 2SC1815 BL
3-TR702	ET-330225	TR 2SC1815 BL
3-TR703	ET-338565	TR 2SD1302 R,S
3-TR704	ET-338565	TR 2SD1302 R,S
3-TR705	ET-330225	TR 2SC1815 BL
3-TR706	ET-330225	TR 2SC1815 BL
3-TR707	ET-330225	TR 2SC1815 BL
3-D101	ED-713348	D SILICON 1SS176
3-D102	ED-713348	D SILICON 1SS176
3-D103	ED-706596	D SILICON KB167
3-D201	ED-713348	D SILICON 1SS176
3-D301	ED-713348	D SILICON 1SS176
3-D601	ED-713919	D SILICON 1SS178
3-D602	ED-713919	D SILICON 1SS178
3-D603	ED-713348	D SILICON 1SS176
3-D604	ED-713348	D SILICON 1SS176
3-D605	ED-713348	D SILICON 1SS176
3-D606	ED-713348	D SILICON 1SS176
3-S101	ES-715099	SW PUSH [FUNCTION]
3-S401	ES-716143	SW PUSH [ENERGIZER]
3-S701	ES-716143	SW PUSH [DOLBY NR]
3-VT301	EV-715098	R S-FIX 103
3-VR401	EV-715109	VR ROTARY 503
3-VR402	EV-715108	VR ROTARY 103
3-VT601A	EV-716148	R S-FIX 104 [FU,FS]
3-VT601B	EV-715103	R S-FIX 103 [FL]
3-VT602A	EV-716148	R S-FIX 104 [FU,FS]
3-VT602B	EV-715103	R S-FIX 103 [FL]
3-F101	EH-716156	FILTER BP BPF-88108
3-F101B	EH-713195	FILTER BP BPWB5 [FL]
3-CF201	EH-749216	FILTER CE E10.7S
3-CF202	EH-713194	FILTER CE 460B
3-CF203	EH-713194	FILTER CE 460B
3-IT101	EO-713192	COIL IFT FM-M 22265844
3-IT201	EO-714077	COIL IFT-IT13-4837
3-IT202	EO-709407	COIL IFT FM-D
3-T701	EO-709425	COIL CHOKE AF 12MH
3-T702	EO-709425	COIL CHOKE AF 12MH
3-L101	EO-742244	COIL FM-RF
3-L102	EO-713191	COIL FM RF
3-L103A	EO-713196	COIL OSC MW 22245450 [FU,FS]
3-L103B	EO-702670	COIL OSC LW [FL]
3-L104A	EO-715097	COIL ANT ASSY [FU,FS]
3-L104B	SZ-716325	CLAMPER CORD [FL]
3-L105A	EO-713197	COIL OSC SW 22285353 [FU,SF]
9-L105B	EO-713196	COIL OSC MW 22245450 [FL]
3-L106A	EO-715097	COIL ANT ASSY [FS,FU]
3-L106B	EO-714066	COIL ANT SW [FL]
3-L107A	EO-713198	COIL OSC SW [FS,FU]
3-L107B	EO-714064	COIL OSC SW [FL]
3-L601	EO-715100	COIL OSC AF
3-L701	EO-713931	COIL CHOKE AF
3-L702	EO-713931	COIL CHOKE AF
3-CT102A	EC-713202	C S-FIX [FU,FS]
3-CT102B	EC-706605	C S-FIX 1R [FL]
3-CT103A	EC-713202	C S-FIX [FU,FS]
3-CT103B	EC-706605	C S-FIX 1R [FL]
3-CT104	EC-713202	C S-FIX
3-R205	ER-324251	R OMF H FS 1W 101J
3-R308	ER-324251	R OMF H FS 1W 101J
3-R652	ER-715104	R OMF 1W 3R3M
3-R655	ER-341633	R OMF H S15 FS 1W 680J
3-R658	ER-324251	R OMF H FS 1W100J
3-R667	ER-702368	⚠ R FUSE 1/4W 2R2J
3-R733	ER-707982	R OMF FS 1W 330J
3-R739	ER-324251	R OMF H FS 1W 101J
3-J601	EJ-715102	JACK 3.5 [MIC]
3-VC101A	EC-716157	VC POLY VC-4-20/335 [FS,FU]
3-VC101B	EC-716460	VC POLY VC-4-20/335 [FL]

4. AF PC BOARD

REF. NO.	PART NO.	DESCRIPTION
4-IC501	EI-713942	IC TA7270P
4-IC901	EI-711984	IC BA3707
4-TR1	ET-349285	⚠ TR 2SD1406 Y
4-TR2	ET-328844	⚠ TR 2SC2120 O,Y
4-TR403	ET-307159	TR 2SC2240 GR,BL
4-TR404	ET-307195	TR 2SC2240 GR,BL
4-TR405	ET-330225	TR 2SC1815 BL
4-TR406	ET-330225	TR 2SC1815 BL
4-TR407	ET-330225	TR 2SC1815 BL
4-TR408	ET-330225	TR 2SC1815 BL
4-TR409A	ET-330225	TR 2SC1815 BL [FU,FS]
4-TR409B	ET-307195	TR 2SC2240 GR,BL [FL]
4-TR410	ET-307195	TR 2SC2240 GR,BL
4-TR411	ET-307195	TR 2SC2240 GR,BL
4-TR412	ET-307195	TR 2SC2240 GR,BL
4-TR413	ET-353734	TR FET 2SJ103 GR,BL
4-TR414	ET-353734	TR FET 2SJ103 GR,BL
4-TR901	ET-308867	TR 2SA1015 O,Y,GR
4-D6	ED-347149	D ZENER H 05Z8.2 Y
4-D7	ED-337606	D ZENER H 05Z6.2 Y
4-D901	ED-713348	D SILICON 1SS176
4-D902	ES-713348	D SILICON 1SS176
4-D903	ED-713348	D SILICON 1SS176
4-S402	ES-716158	SW SLIDE [PHONO-LINE/CD]
4-S403	ES-716159	SW SLIDE [BEAT]
4-R2	ER-303840	R OMF H FS 1W 470J
4-R3A	ER-702368	⚠ R FUSE 1/4W 2R2J [EXCEPT C,A]
4-R3B	ER-353878	⚠ R OMF H S15 FS 1W 2R2J [C,A]
4-R4	ER-704159	R OMF 1W 471
4-R5	ER-313791	R OMF H FS 1W 681J
4-R6	ER-702368	⚠ R FUSE 1/4W 2R2J [FU,FS]
4-R449	ER-303840	R OMF H FS 1W 470J
4-R501	ER-701107	R OMF 1W 151J
4-R502	ER-701107	R OMF 1W 151J
4-C6	EC-316187	C EC V CUT SM 102M 16DC
4-C511	EC-316187	C EC V CUT SM 102M 16DC
4-C512	EC-316187	C EC V CUT SM 102M 16DC
4-C515	EC-322420	C EC V CUT SM 332M 25.0DC
4-J401	EJ-709456	PIN J US4P
4-J501	EJ-706586	PHONE J 3.5 [SP-L]
4-J502	EJ-706586	PHONE J 3.5 [SP-R]

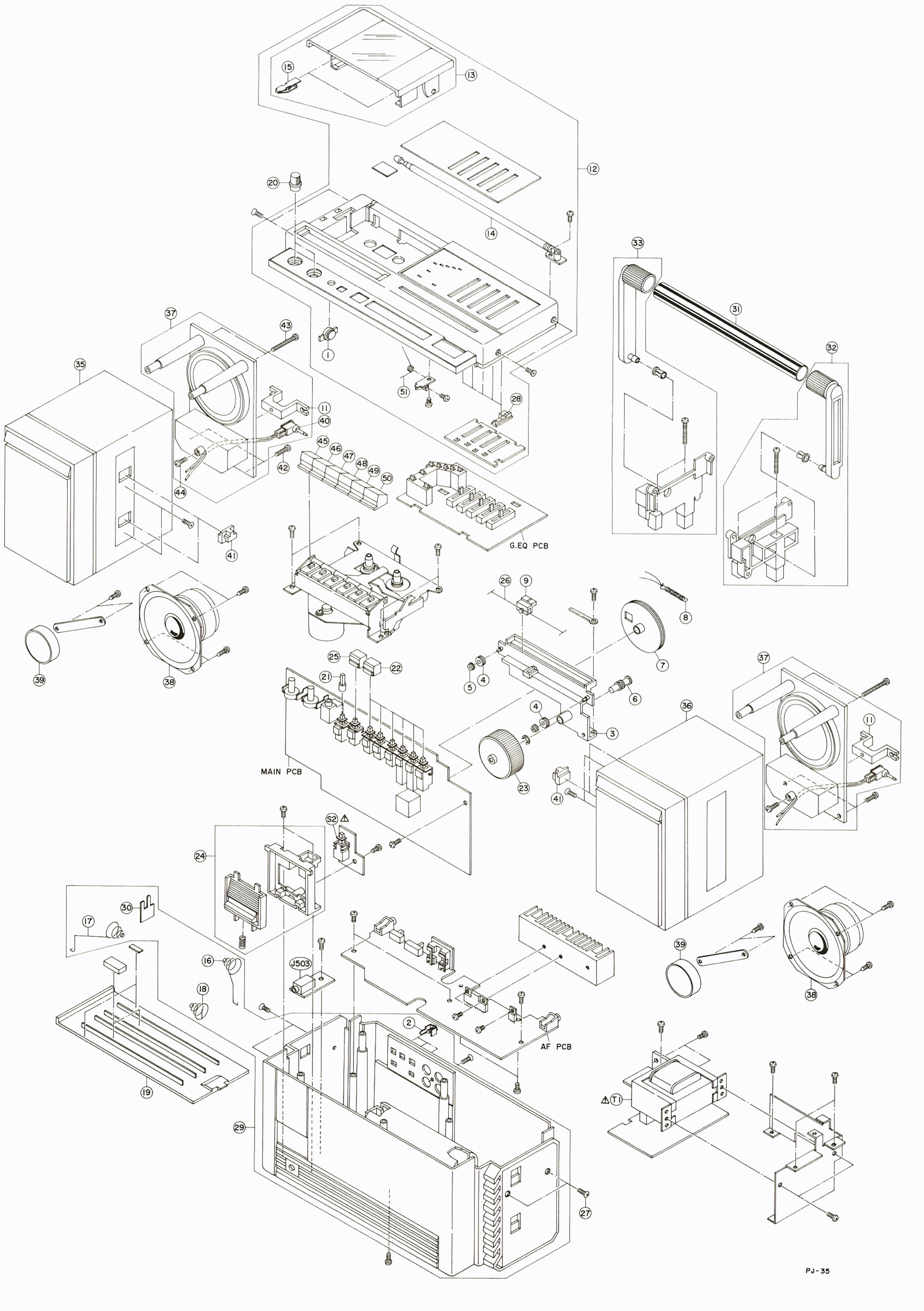
5. G.EQ PC BOARD

REF. NO.	PART NO.	DESCRIPTION
5-IC801	EI-715105	IC LA3600
5-IC802	EI-715105	IC LA3600
5-IC851	EI-715106	IC BA6154
5-TR201	ET-330225	TR 2SC1815 BL
5-TR851	ET-330225	TR 2SC1815 BL
5-D851	ED-749384	D LED TLG208
5-D852	ED-749384	D LED LTG208
5-D853	ED-749384	D LED TLG208
5-D854	ED-749384	D LED TLG208
5-D855	ED-749384	D LED TLG208
5-D856	ED-749384	D LED TLG208
5-D857	ED-749384	D LED TLG208
5-D858	ED-749382	D LED TLR208
5-VT801	EV-716000	VR SLIDE 503
5-VT802	EV-716000	VR SLIDE 503
5-VT803	EV-716000	VR SLIDE 503
5-VT804	EV-716000	VR SLIDE 503
5-VT805	EV-716000	VR SLIDE 503
5-R809	ER-324251	R OMF H FS 1W 101J
5-R856A	ER-707982	R OMF FS 1W 330J [FU,FS]
5-R856B	ER-303840	R OMF H FS 1W 470J [FL]

6. POWER SUPPLY PC BOARD

REF. NO.	PART NO.	DESCRIPTION
		POWER SUPPLY PC BOARD
6-D1	ED-707920	⚠ D SILICON S2V10X
6-D2	ED-707920	⚠ D SILICON S2V10X
6-D3	ED-707920	⚠ D SILICON S2V10X
6-D4	ED-707920	⚠ D SILICON S2V10X
6-D5	ED-306724	D SILICON S5277B 100/1.0A
6-S1A	ES-715155	⚠ SW SELECTOR [U]
6-S1B	ES-716144	⚠ SW SELECTOR [C,A]
6-J1A	EJ-715154	⚠ SOCKET INLET [U,E,V,B,S]
6-J1B	EJ-716142	⚠ SOCKET INLET [C,A]
		FINAL ASSEMBLY BLOCK
6-F1A	EF-300609	⚠ FUSE FST3100 T 250V 5.00A [U,E,V,B,S]
6-F1B	EF-346139	⚠ FUSE TSC 125V 5.00A [C,A]
6-F2	EF-346139	⚠ FUSE TSC 125V 5.00A [C,A]

FINAL ASSEMBLY BLOCK



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7. FINAL ASSEMBLY BLOCK

REF. NO.	PART NO.	DESCRIPTION
	FINAL ASSEMBLY BLOCK	
7-1	MZ-715129	DAMPER ASSY
7-2	EJ-716031	TERMINAL SIP
7-3	TK-716160	CHASSIS MAIN
7-4	MR-714202	PULLEY
7-5	ZW-711691	BUSHING
7-6	MS-715136	SHAFT TUNING
7-7	MR-715137	DIAL WHEEL
7-8	ZG-742239	SP PULL AJ-360
7-9	MD-715139	POINTER
7-10xA	EW-715125	⚠ AC CORD CP SET [U]
7-10xB	EW-716098	⚠ AC CORD 2 CORES UL-SET [C,A]
7-10xC	EW-706565	⚠ AC CORD (E) [E,V]
7-10xD	EW-716096	⚠ AC CORD 2 CORES BS [B]
7-10xE	EW-716097	⚠ AC CORD 2 CORES SET-A2 [S]
7-11	SZ-716325	CLAMPER CORD
7-12A	BC-715125	CABINET UPPER BLK PJ-35 FU/FS [FU,FS]
7-12B	BC-716151	CABINET UPPER BLK PF-35FL [FL]
7-12C	BC-716457	CABINET UPPER BLK PJ-35FU/FS-R [FU,FS]
7-12D	BC-716458	CABINET UPPER BLK PJ-35FL-R [FL]
7-12E	BC-716153	CABINET UPPER BLK PJ-35FU/FS-B [FU,FS]
7-12F	BC-716456	CABINET UPPER BLK PJ-35 FL-B [FL]
7-13	BD-715126	LID PART
7-13R	BD-716594	LID PART-R
7-13B	BD-716150	LID PART-B
7-14	EE-716030	ANT ROD
7-15	ZG-716320	SP P
7-16	ZG-713699	SP BATTERY-C
7-17	ZG-714215	SP BATTERY-SX
7-18	ZG-714214	SP BATTERY-A
7-19	BC-715135	COVER BATTERY
7-19R	BC-716149	COVER BATTERY-B [RED,BLACK]
7-20	SK-715145	KNOB VR
7-21	SK-715146	KNOB DIRECTION
7-22	SK-715147	KNOB SELECT
7-23	SK-715148	KNOB TUNING
7-24	SK-715149	KNOB POWER PART
7-25	SK-716167	KNOB EXCITER
7-26	TA-716595	DIAL STRING PART
7-27	ZS-716168	OCS30x12STL
7-28	SK-715130	KNOB SLIDE
7-29	BC-715131	CABINET BOTTOM BLK PJ-35
7-29R	BD-716591	CABINET BOTTOM BLK PJ-35-R
7-29B	BC-716590	CABINET BOTTOM BLK PJ-35-B
7-30	EJ-713701	SP BATTERY-A
7-31	SH-715134	HANDLE
7-32	SZ-716597	HOLDER HANDLE (R) PART
7-33	SZ-716596	HOLDER HANDLE (L) PART
7-34	ZS-714380	T2BID30x25
7-35	BC-716161	CABINET SPEAKER (L) BLK PJ-35
7-35R	BC-716592	CABINET SPEAKER (L) BLK PJ-35-R
7-35B	BC-716154	CABINET SPEAKER (L) BLK PJ-35-B
7-36	BC-716166	CABINET SPEAKER (R) BLK PJ-35
7-36R	BC-716593	CABINET SPEAKER (R) BLK PJ-35-R
7-36B	BC-716155	CABINET SPEAKER (R) BLK PJ-35-B
7-37	BC-716598	COVER BACK CABINET SPEAKER PART
7-38	SS-715142	SPEAKER SP-80
7-39	SS-715143	SPEAKER SP-30
7-40	EW-716162	CORD SPEAKER W/JACK
7-41	SZ-716164	JOINT SPEAKER BOX
7-42	ZS-711858	2DTBID30x12ZN 3K
7-43	ZS-716165	T2BID30x30 NI3
7-44	ZS-711859	2DTBID30x20ZN 3A
7-45	SB-715118	BUTTUN RECK
7-46	SB-715119	BUTTON PLAY
7-47	SB-715120	BUTTON REW
7-48	SB-715121	BUTTON FF
7-49	SB-715122	BUTTON STOP
7-50	SB-715123	BUTTON PAUSE
7-51	ZG-715128	SP EJECT
7-T1A	BT-715153	⚠ TRANS POWER 22224719 [U]
7-T1B	BT-716145	⚠ TRANS POWER 22224720 C,A [C,A]
7-T1C	BT-716147	⚠ TRANS POWER 22224723 E,V [E,V]
7-T1D	BT-716146	⚠ TRANS POWER 22224722 S,B [B,S]
	POWER SW PC BOARD	
7-S2	ES-715111	⚠ SW PUSH
	HEAD PHONE PC BOARD	
7-J503	EJ-713933	JACK 3.5ST

SYMBOL FOR COLOR VARIATION

NON: SILVER
R: RED
B or BL: BLACK

INDEX

PART NO.	REF. NO.	PART NO.	REF. NO.	PART NO.	REF. NO.	PART NO.	REF. NO.	PART NO.	REF. NO.
BA-716650	2-2D	EF-346139	6-F2	ET-307195	3-TR623B	ML-712806	1-34	ZS-749293	1-118
BA-716651	2-2C	EH-713194	3-CF202	ET-307195	4-TR410	ML-716169	1-15	ZS-749293	1-119
BA-716652	2-2B	EH-713194	3-CF203	ET-307195	4-TR411	ML-716175	1-43	ZW-711691	7-5
BA-716653	2-2A	EH-713195	3-F101B	ET-307195	4-TR412	ML-716177	1-45	ZW-716176	1-44
BA-716654	2-1A	EH-716156	3-F101	ET-307195	4-TR403	ML-716179	1-51	ZW-716181	1-53
BA-716655	2-1B	EH-749216	3-CF201	ET-307195	4-TR404	ML-716180	1-52	ZW-716206	1-103
BB-715112	1-1	EI-351848	3-IC201	ET-307195	4-TR409B	ML-716182	1-54		
BC-715125	7-12A	EI-708420	3-IC301	ET-308867	4-TR901	ML-716205	1-127		
BC-715131	7-29	EI-709447	3-IC601	ET-328844	4-TR2	MR-714202	7-4		
BC-715135	7-19	EI-711984	4-IC901	ET-328861	3-TR620	MR-715137	7-7		
BC-716149	7-19R	EI-713190	3-IC101	ET-330225	3-TR201	MS-715136	7-6		
BC-716151	7-12B	EI-713916	3-IC701	ET-330225	3-TR301	MS-716170	1-27		
BC-716153	7-12E	EI-713942	4-IC501	ET-330225	3-TR605	MV-716186	1-62		
BC-716154	7-35B	EI-715105	5-IC801	ET-330225	3-TR606	MZ-711710	1-41		
BC-716155	7-36B	EI-715105	5-IC802	ET-330225	3-TR607	MZ-712804	1-38		
BC-716161	7-35	EI-715106	5-IC851	ET-330225	3-TR608	MZ-712813	1-48		
BC-716166	7-36	EJ-706586	4-J501	ET-330225	3-TR609	MZ-712814	1-49		
BC-716456	7-12F	EJ-706586	4-J502	ET-330225	3-TR610	MZ-715129	7-1		
BC-716457	7-12C	EJ-709456	4-J401	ET-330225	3-TR618	MZ-716171	1-31		
BC-716458	7-12D	EJ-713701	7-30	ET-330255	3-TR621	MZ-749256	1-39		
BC-716590	7-29B	EJ-713933	7-J503	ET-330225	3-TR623A	SB-715118	7-45		
BC-716592	7-35R	EJ-715102	3-J601	ET-330225	3-TR701	SB-715119	7-46		
BC-716593	7-36R	EJ-715154	6-J1A	ET-330225	3-TR702	SB-715120	7-47		
BC-716598	7-37	EJ-716031	7-2	ET-330225	3-TR705	SB-715121	7-48		
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BT-716146	7-T1D	EO-713931	3-L701	ET-338565	3-TR401	SS-715142	7-38		
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EC-316187	4-C511	EO-714066	3-L106B	ET-338565	3-TR604	SZ-716325	3-L104B		
EC-316187	4-C512	EO-714077	3-IT201	ET-338565	3-TR615	SZ-716325	7-11		
EC-322420	4-C515	EO-715097	3-L104A	ET-338565	3-TR616	SZ-716596	7-33		
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ED-347149	4-D6	ER-313791	4-R5	ET-353734	4-TR413	ZG-714215	7-17		
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ED-713348	4-D902	ER-707982	5-R856A	EW-715152	7-10xA	ZG-716198	1-18		
ED-713348	4-D901	ER-715104	3-R652	EW-716096	7-10xD	ZG-716199	1-83		
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